

Historic, archived document

Do not assume content reflects current
scientific knowledge, policies, or practices.

1
Ag 84M
Cop. 4

INSECTS ASSOCIATED WITH WILD PLANTS IN EUROPE AND THE MIDDLE EAST

BIOLOGICAL CONTROL OF WEEDS SURVEYS



UNITED STATES
DEPARTMENT OF
AGRICULTURE

MISCELLANEOUS
PUBLICATION
NUMBER 1382

PREPARED BY
SCIENCE AND
EDUCATION
ADMINISTRATION

ABSTRACT

PEMBERTON, ROBERT W., and EDNA M. HOOVER. Insects associated with wild plants in Europe and the Middle East. Biological control of weeds surveys. U.S. Department of Agriculture Miscellaneous Publication No. 1382, 33 p.

This publication lists 351 species of European insects that were collected or reared from 71 weeds of European origin. The insects species—specimens of which are in the USDA's Biological Control of Weeds Laboratory—Europe insect collection in Rome, Italy—are listed taxonomically and by host plant. The host plant listing includes data on rearing, feeding, and other insect-plant associations.

KEYWORDS: Biological control of weeds, insect feeding, insect rearing, host plants, weeds, *Artium*, *Boreava*, *Carlina*, *Carthamus*, *Centaurea*, *Cirsium*, *Cynara*, *Cytisus*, *Echinops*, *Euphorbia*, *Galactites*, *Genista*, *Hypericum*, *Linaria*, *Onopordum*, *Quercus*, *Salsola*, *Salvia*, *Scrophularia*, *Senecio*, *Silybum*, *Tamarix*, *Tribulus*.

ACKNOWLEDGMENTS

We would like to express our thanks to Lloyd A. Andres, Paul H. Dunn, Kenneth E. Frick, B. David Perkins (all associated at one time with the Rome laboratory), and Antonio Rizza (currently in the Rome laboratory), who allowed us to compile and publish data that they collected. We also wish to thank Gary Buckingham (former research

leader at the laboratory and currently at the USDA's Biological Pest Control Research Unit, Gainesville, Fla.) whose concern for the collection and the information it contained brought the senior author to Rome to conduct the study that has resulted in this publication.

CONTENTS

	Page		Page
List of contributors	iv	Table 2.—Selected weedy plants and associated insects, extent of their association, and country of origin	15
Introduction	1	Index of insect and plant names	28
Table 1.—Taxonomic list of insects and associated weedy plants	2		

LIST OF CONTRIBUTORS

The following scientists provided the insect identifications referred to in table 1, pages 2 to 14: Systematic Entomology Laboratory (SEL), Insect Identification and Beneficial Insect Introduction Institute, Agricultural Research, Science and Education Administration, USDA, Beltsville Md.:

- | | | |
|---------------------------------|---------------------------------|----------------------------------|
| 1. Anderson, W. H. ¹ | 11. Herring, J. L. ¹ | 21. Steyskal, G. C. ¹ |
| 2. Batra, S. W. T. | 12. Hodges, R. W. | 22. Stoetzel, M. B. |
| 3. Burks, B. D. ¹ | 13. Kingsolver, J. M. | 23. Thompson, F. C. |
| 4. Capps, H. W. ¹ | 14. Knutson, L. | 24. Todd, E. L. ¹ |
| 5. Ferguson, D. C. | 15. Kramer, J. P. | 25. Vogt, G. B. ³ |
| 6. Foote, R. H. | 16. Marsh, P. M. | 26. Warner, R. E. ¹ |
| 7. Gagne, R. J. | 17. Menke, A. S. | 27. White, R. E. |
| 8. Gordh, G. ² | 18. Sabrosky, C. W. | 28. Whitehead, D. R. |
| 9. Gordon, R. D. | 19. Smith, D. R. | 29. Wirth, W. W. |
| 10. Gurney, A. B. ³ | 20. Spilman, T. J. | |

Cooperating Scientists for SEL:

- | | | |
|--------------------------------|--------------------------------------|------------------------------|
| 30. Arnett, R. H. ⁴ | 32. Connell, W. A. ⁶ | 34. Weld, L. H. ⁵ |
| 31. Chapin, E. A. ⁵ | 33. Muesebeck, C. F. W. ⁷ | |

Department of Entomology, U.S. National Museum, Smithsonian Institution, Washington, D.C.:

- | | | |
|----------------------|------------------|-----------------------|
| 35. Davis, D. R. | 37. Field, W. D. | 39. Froeschner, R. C. |
| 36. Duckworth, W. D. | 38. Flint, O. S. | |

¹ Retired.

² Now at the University of California at Riverside.

³ Retired, resident cooperating scientist with SEL.

⁴ Siena College, Loudonville, N.Y.

⁵ Deceased.

⁶ Cooperating scientist, Beneficial Insect Research Laboratory, Newark, Del.

⁷ Resident cooperating scientist, SEL, and research associate, U.S. National Museum, Washington D.C.

INSECTS ASSOCIATED WITH WILD PLANTS IN EUROPE AND THE MIDDLE EAST

Biological Control of Weeds Surveys

Compiled by ROBERT W. PEMBERTON, *collaborating entomologist*, and
EDNA M. HOOVER, *entomologist (retired)*

INTRODUCTION

The Biological Control of Weeds Laboratory-Europe of the United States Department of Agriculture (USDA) is located in Rome, Italy. The primary function of this facility, which was started in 1959 by Lloyd A. Andres and Antonio Rizza, is the discovery and study of natural enemies associated with weeds native to Europe and the Middle East, which are problem exotics in North America.

This publication lists the insects that have been collected and reared from some of these exotic weeds from 1959 to 1976. The list contains only the insect species represented in the laboratory collection and thereby omits many species that were collected and reared but for various reasons are no longer in the Rome collection.

The plant taxa included in this publication consist of 23 genera and 71 identified species; 351 insect species, representing 91 families, are listed as collected or reared from these plants. Although the majority of the collections were made in Italy, material was also obtained in Austria, Bulgaria, Egypt, England, France, Germany, Greece, Iran, Israel, Spain, Switzerland, Turkey, and Yugoslavia.

The insects are listed in two tables, one tax-

onomic (table 1, p. 2) and the other a faunal listing under the host plants (table 2, p. 15).

The large number of rearings and feeding observations listed in the host plant table is significant. Of the 351 insect species included in this work, more than half were reared; 260 are herbivorous and more than two-thirds of these were reared. In all, 317 rearing records are listed; in this context, we use rearing record to mean a unique combination of insect and host. For example, the Tephritid *Urophora quadrifasciata* (Meigen) was reared from *Centaurea jaceae* L. and *C. maculosa* Lam., thus yielding two records. In addition, when the same insect species is reared in two different countries, two records are counted, even if the same host is involved.

The information contained in these tables was taken from specimen labels and laboratory records. The inclusion of precise locality and collection dates for all of the species would have made this work too lengthy. This type of information can be obtained by writing the Location Leader, Biological Control of Weeds Laboratory-Europe, c/o American Embassy, Agriculture, New York, N.Y., APO 09794.

The senior author served principally as the organizer and compiler of the data. The junior author worked with scientists in verifying the accuracy of the scientific names and in determining, from records, the persons responsible for the identifications.

The scientists of the Systematic Entomology

¹Respectively, Division of Biological Control, Department of Entomology, University of California, Berkeley, Calif. 94706; and Insect Identification and Beneficial Insect Introduction Institute, Beltsville Agricultural Research Center, Beltsville, Md. 20705.

Laboratory, USDA; the Department of Entomology, Smithsonian Institution; and collaborators of both organizations are contributors to this work and had the task of identifying the material and reviewing and correcting the scientific names.

The following scientists conducted the surveys that serve as a basis of this publication: Lloyd A. Andres and Paul H. Dunn, USDA Biological Control of Weeds Laboratory, Albany, Calif.; Kenneth E. Frick, USDA Delta States Agricultural Center, Stoneville, Miss.; B. David Perkins,

USDA Animal and Plant Health Inspection Service, Yaounde, Cameroon; and Antonio Rizza, USDA Biological Control of Weeds Laboratory-Europe, Rome, Italy.

This publication is intended to be a source book for biological control of weeds workers who have the task of trying to control the numerous European weeds that infest the United States. It should also be of interest to insect ecologists, plant ecologists, and insect taxonomist because of the large number of insect-plant associations it contains.

Table 1. —*Taxonomic list of insects and associated weedy plants*

Insect ¹	Associated plant
COLEOPTERA	
Alleculidae	
<i>Cteniopus</i> sp. [20] ² -----	<i>Tamarix</i> sp.
<i>Omophulus</i> sp. [20] -----	<i>Linaria</i> sp.
<i>Podonta aubei</i> Mulsant [20] -----	Do.
Anobiidae	
<i>Lasioderma baudii</i> (Schilsky) -----	<i>Cirsium</i> sp.
	<i>Cynara scolymus</i> L.
	<i>Senecio jacobaea</i> L.
<i>Lasioderma</i> probably <i>obscurum</i> Solsky [27] -----	<i>Centaurea amara</i> L.
<i>Lasioderma serricorne</i> (Fabricius) [20, 27] -----	<i>Centaurea diffusa</i> Lamarek
	<i>Centaurea jacea</i> L.
	<i>Centaurea napifolia</i> L.
	<i>Centaurea nicaeensis</i> Allioni
Anthicidae	
<i>Anthicus</i> sp. [20] -----	<i>Linaria</i> sp.
Bruchidae	
<i>Bruchidius</i> near <i>bimaculatus</i> (Olivier) [13] -----	<i>Tamarix</i> sp.
<i>Bruchidius</i> near <i>imbricornis</i> (Panzer) [13] -----	Do.
<i>Bruchidius nudus</i> (Allard) [13] -----	Do.
<i>Bruchidius quinqueguttatus</i> (Olivier) complex -----	<i>Centaurea repens</i> L.
<i>Bruchidius seminarius</i> (L.) [13] -----	<i>Cytisus scoparius</i> (L.) Link
<i>Bruchidius</i> probably <i>unicolor</i> (Olivier) -----	<i>Linaria vulgaris</i> Miller
<i>Bruchidius</i> sp. [13] -----	<i>Cirsium arvense</i> (L.) Scopoli
<i>Bruchus brachialis</i> Fabricius [13] -----	<i>Linaria grandiflora</i> Desfontaines
	<i>Quercus pubescens</i> Willdenow
<i>Bruchus dentipes</i> Baudi [13] -----	<i>Linaria genistifolia</i> (L.) Miller
<i>Spermophagus sericeus</i> (Geoffroy) [13] -----	<i>Centaurea repens</i> L.
	<i>Scrophularia canina</i> L.
Buprestidae	
<i>Agrilus biguttatus</i> (Fabricius) [13, 25] -----	<i>Cytisus scoparius</i> (L.) Link
Cantharidae	
<i>Cantharis</i> sp. [20] -----	<i>Tamarix</i> sp.
<i>Podabrus</i> sp. [9] -----	<i>Linaria dalmatica</i> (L.) Miller
Cerambycidae	
<i>Agapanthia cardui</i> (L.) [20, 25] -----	<i>Galactites tomentosa</i> Moench
<i>Agapanthia dahli</i> (Richter) [20, 25] -----	<i>Cirsium</i> sp.
	<i>Galactites tomentosa</i> Moench

See footnotes at end of table.

Table 1. —Taxonomic list of insects and associated weedy plants—Continued

<i>Insect</i> ¹	<i>Associated plant</i>
COLEOPTERA—Continued	
Cerambycidae—Continued	
<i>Agapanthia</i> probably <i>dahli</i> (Richter) [20] -----	<i>Senecio aquaticus</i> Hill
<i>Cartallum ebulinum</i> (L.) [20, 25] -----	<i>Boreava</i> sp.
<i>Parmena</i> sp. [20] -----	<i>Centaurea cineraria</i> L.
<i>Phytoecia pustulata</i> (Schrank) [20, 25] -----	<i>Salvia verbenaca</i> L.
<i>Phytoecia</i> sp. [20, 25] -----	<i>Linaria fastigiata</i> Chavannes
	<i>Linaria genistifolia</i> (L.) Miller
	<i>Linaria kurdica</i> Boissier & Hohenacker
Chrysomelidae	
<i>Altica carduorum</i> (Guérin-Ménéville) [27] -----	<i>Cirsium arvense</i> (L.) Scopoli
	<i>Cirsium vulgare</i> (Savi) Tenore
<i>Cassida</i> near <i>deflorata</i> Suffrian [25, 27] -----	<i>Silybum marianum</i> (L.) Gaertner
<i>Cassida</i> probably <i>vibex</i> L. [25, 27] -----	<i>Cirsium arvense</i> (L.) Scopoli
	<i>Silybum marianum</i> (L.) Gaertner
<i>Chaetocnema</i> probably <i>conducta</i> Motschulsky [27] -----	<i>Senecio aquaticus</i> Hill
<i>Chrysolina grossa</i> (Fabricius) [27] -----	<i>Salvia</i> sp.
<i>Chrysolina gypsophylae</i> Küster [27] -----	<i>Linaria dalmatica</i> (L.) Miller
<i>Chrysolina hyperici</i> Forster [27] -----	<i>Hypericum</i> sp.
<i>Chrysolina variolosa</i> Pethena [27] -----	<i>Linaria</i> sp.
<i>Chrysolina</i> sp. [27] -----	<i>Linaria vulgaris</i> Miller
	<i>Linaria</i> sp.
<i>Chrysomela</i> sp. or near [27] -----	<i>Cytisus scoparius</i> (L.) Link
<i>Clytra atraphaxidis</i> Pallas or near [27] -----	<i>Centaurea repens</i> L.
<i>Clytra laeviuscula</i> Ratzeburg or near [27] -----	<i>Linaria</i> sp.
Probably <i>Coptocephala</i> sp. [27] -----	<i>Centaurea repens</i> L.
<i>Crepidodera ferruginea</i> (Scopoli) or near [27] -----	<i>Onopordum tauricum</i> Willdenow
<i>Cryptocephalus hypochoeridis</i> (L.) [27] -----	<i>Onopordum</i> sp.
<i>Cryptocephalus populi</i> Suffrian or near [27] -----	<i>Salsola</i> sp.
<i>Diorhabda</i> sp. [27] -----	<i>Tamarix</i> sp.
<i>Gastroidea polygona</i> (L.) [27] -----	<i>Cynara scolymus</i> L.
	<i>Senecio aquaticus</i> Hill
	<i>Silybum marianum</i> (L.) Gaertner
<i>Lema cyanella</i> L. [27] -----	<i>Cirsium arvense</i> (L.) Scopoli
<i>Longitarsus dorsalis</i> (Fabricius) [27] -----	<i>Senecio aquaticus</i> Hill
<i>Longitarsus ganglbaueri</i> Heikertinger [27] -----	Do.
<i>Longitarsus</i> probably <i>ganglbaueri</i> Heikertinger [27] -----	Do.
	<i>Senecio jacobaea</i> L.
<i>Longitarsus jacobaea</i> Waterhouse [27] -----	<i>Senecio aquaticus</i> Hill
<i>Longitarsus</i> probably <i>jacobaea</i> Waterhouse [27] -----	Do.
	<i>Senecio jacobaea</i> L.
<i>Longitarsus</i> near <i>tabidus</i> (Fabricius) [27] -----	<i>Senecio aquaticus</i> Hill
<i>Longitarsus</i> sp. [27] -----	<i>Senecio jacobaea</i> L.
<i>Oulema melanopus</i> (L.) [27] -----	<i>Senecio aquaticus</i> Hill
	<i>Senecio jacobaea</i> L.
<i>Pachybrachys</i> sp. [27] -----	<i>Boreava</i> sp.
<i>Phyllotreta</i> sp. [27] -----	<i>Boreava</i> sp.
	<i>Linaria</i> sp.
<i>Phytodecta olivacea</i> Forster -----	<i>Cytisus scoparius</i> (L.) Link
<i>Sermylassa halensis</i> (L.) [27] -----	<i>Senecio jacobaea</i> L.
<i>Sphaeroderma rubidum</i> (Graells) [25] -----	<i>Cirsium arvense</i> (L.) Scopoli
	<i>Cynara scolymus</i> L.
<i>Sphaeroderma testaceum</i> L. [25, 27] -----	<i>Cirsium arvense</i> (L.) Scopoli
Coccinellidae	
<i>Adonia variegata</i> (Goeze) [9, 31] -----	<i>Linaria</i> sp.

Table 1. —*Taxonomic list of insects and associated weedy plants—Continued*

<i>Insect</i> ¹	<i>Associated plant</i>
COLEOPTERA—Continued	
Coccinellidae—Continued	
<i>Coccinella quinquepunctata</i> L. [31] -----	Do.
<i>Coccinella septempunctata</i> L. [9,31] -----	Do.
	<i>Tamarix</i> sp.
<i>Rhyzobius litura</i> (Fabricius) [31] -----	<i>Centaurea napifolia</i> L.
<i>Scymnus</i> (s.str.) sp. [9] -----	<i>Linaria</i> sp.
<i>Scymnus</i> sp. [31] -----	<i>Centaurea amara</i> L.
	<i>Linaria</i> sp.
<i>Subcoccinella vigintiquattuorpunctata</i> (L.) [9, 31] -----	<i>Cynara scolymus</i> L.
	<i>Linaria</i> sp.
Curculionidae	
<i>Acalles diocletianus</i> (Germar) -----	<i>Cynara scolymus</i> L.
<i>Acalles dromedarius</i> Boheman -----	<i>Centaurea napifolia</i> L.
	<i>Cynara scolymus</i> L.
<i>Acalles</i> sp. [26] -----	<i>Centaurea napifolia</i> L.
	<i>Centaurea nicaeensis</i> Allioni
	<i>Centaurea</i> sp.
<i>Alophus nictitans</i> Boheman [28] -----	<i>Senecio aquaticus</i> Hill.
<i>Apion</i> near <i>compactum</i> Desbrochers [26] -----	<i>Cytisus</i> sp.
<i>Apion detritum</i> Rey [26] -----	<i>Centaurea amara</i> L.
	<i>Cirsium arvense</i> (L.) Scopoli
	<i>Silybum marianum</i> (L.) Gaertner
<i>Apion</i> near <i>formanekei</i> Wagner [26] -----	<i>Genista sagittalis</i> L.
<i>Apion fuscirostre</i> (Fabricius) [26] -----	<i>Cytisus scoparius</i> (L.) Link
<i>Apion onopordi</i> Kirby [26, 28] -----	<i>Centaurea maculosa</i> Lamarck
	<i>Onopordum tauricum</i> Willdenow
<i>Apion</i> sp. [26, 28] -----	<i>Centaurea nicaeensis</i> Allioni
	<i>Cirsium vulgare</i> (Savi) Tenore
	<i>Genista</i> sp.
	<i>Linaria</i> sp.
	<i>Tamarix</i> sp.
<i>Bangasternus</i> sp. [26] -----	<i>Centaurea jacea</i> L.
<i>Ceutorhynchidius horridus</i> (Panzer) [26, 28] -----	<i>Galactites tomentosa</i> Moench
<i>Ceutorhynchus litura</i> (Fabricius) [26] -----	<i>Cirsium arvense</i> (L.) Scopoli
<i>Ceutorhynchus trimaculatus</i> (Fabricius) [26] -----	<i>Galactites tomentosa</i> Moench
<i>Chlorophanus excisus</i> (Fabricius) [28] -----	<i>Tamarix</i> sp.
<i>Cleonus morbillosus</i> (Fabricius) [26] -----	<i>Cirsium vulgare</i> (Savi) Tenore
<i>Cleonus piger</i> (Scopoli) [26, 28] -----	<i>Arctium minus</i> Bernhardt
	<i>Cirsium arvense</i> (L.) Scopoli
	<i>Cirsium vulgare</i> (Savi) Tenore
	<i>Onopordum tauricum</i> Willdenow
<i>Coniatus</i> sp. [28] -----	<i>Tamarix</i> sp.
<i>Gymnetron antirrhini</i> (Paykull) [26] -----	<i>Linaria vulgaris</i> Miller
<i>Gymnetron linariae</i> (Panzer) [26] -----	Do.
<i>Gymnetron netum</i> (Germar) [26] -----	<i>Linaria heterophylla</i> Desfontaines
	<i>Linaria vulgaris</i> Miller
<i>Gymnetron</i> sp. [26, 28] -----	<i>Centaurea nicaeensis</i> Allioni
	<i>Linaria dalmatica</i> (L.) Miller
	<i>Linaria fastigiata</i> Chavannes
	<i>Linaria genistifolia</i> (L.) Miller
	<i>Linaria lineolata</i> Boissier
	<i>Linaria repens</i> (L.) Miller
	<i>Linaria vulgaris</i> Miller
<i>Hypera postica</i> (Gyllenhal) [26, 28] -----	<i>Centaurea napifolia</i> L.

See footnotes at end of table.

Table 1. — *Taxonomic list of insects and associated weedy plants*—Continued

<i>Insect</i> ¹	<i>Associated plant</i>
COLEOPTERA —Continued	
Curculionidae —Continued	
<i>Larinus australis</i> Capiomont [26] -----	<i>Centaurea phrygia</i> L. <i>Onopordum tauricum</i> Willdenow
<i>Larinus</i> probably <i>australis</i> Capiomont [26] -----	<i>Centaurea</i> sp.
<i>Larinus cynarae</i> (Fabricius) [26,28] -----	<i>Onopordum tauricum</i> Willdenow <i>Onopordum</i> sp. <i>Silybum marianum</i> (L.) Gaertner
<i>Larinus flavescens</i> Germar [26] -----	<i>Carthamus lanatus</i> L. <i>Centaurea nicaeensis</i> Allioni
<i>Larinus jaceae</i> (Fabricius) [26, 28] -----	<i>Carthamus lanatus</i> L.
<i>Larinus latus</i> (Herbst) -----	<i>Onopordum</i> sp.
<i>Larinus</i> near <i>leuzeae</i> Fabre [26] -----	<i>Centaurea scabiosa</i> L.
<i>Larinus longirostris</i> Gyllenhal [26] -----	<i>Centaurea calcitrapa</i> L. <i>Centaurea napifolia</i> L. <i>Centaurea nicaeensis</i> Allioni
<i>Larinus planus</i> (Fabricius) [26] -----	<i>Centaurea amara</i> L. <i>Centaurea jacea</i> L. <i>Cirsium arvense</i> (L.) Scopoli <i>Cirsium vulgare</i> (Savi) Tenore
<i>Larinus rusticanus</i> Gyllenhal [26, 28] -----	<i>Carthamus lanatus</i> L.
<i>Larinus scolymi</i> (Olivier) [26, 28] -----	<i>Cynara scolymus</i> L.
<i>Larinus sturnus</i> (Schaller) [26, 28] -----	<i>Centaurea jacea</i> L. <i>Cirsium vulgare</i> (Savi) Tenore
<i>Larinus turbinatus</i> Gyllenhal [26] -----	<i>Cirsium arvense</i> (L.) Scopoli <i>Cirsium vulgare</i> (Savi) Tenore
<i>Larinus ursus</i> (Fabricius) [26, 28] -----	<i>Carlina corymbosa</i> L. <i>Carlina lanata</i> L. <i>Carlina vulgaris</i> L.
<i>Lixus algirus</i> (L.) [28] -----	<i>Cirsium vulgare</i> (Savi) Tenore <i>Silybum marianum</i> (L.) Gaertner
<i>Lixus cardui</i> Olivier [28] -----	<i>Onopordum acanthium</i> L. <i>Onopordum</i> sp.
<i>Lixus elongatus</i> (Goeze) [26, 25] -----	<i>Cirsium vulgare</i> (Savi) Tenore
<i>Lixus punctiventris</i> Boheman -----	<i>Senecio aquaticus</i> Hill <i>Senecio jacobaea</i> L.
<i>Mecinus janthinus</i> (Germar) [26] -----	<i>Linaria vulgaris</i> Miller
<i>Mecinus</i> sp. [26] -----	<i>Linaria</i> sp.
<i>Microlarinus lareynii</i> (Jacq. du Val) [26] -----	<i>Tribulus terrestris</i> L.
<i>Microlarinus lypriformis</i> (Wollaston) [26] -----	Do.
<i>Otiorhynchus ovatus</i> (L.) [26] -----	<i>Centaurea mauclosa</i> Lamarck
<i>Otiorhynchus rugostriatus</i> (Goeze) [26] -----	<i>Senecio aquaticus</i> Hill
<i>Otiorhynchus</i> sp. -----	<i>Cirsium arvense</i> (L.) Scopoli
<i>Pantomorus cervinus</i> (Boheman) [26] -----	<i>Senecio jacobaea</i> L.
<i>Phrydiuchus spilmani</i> Warner [26] -----	<i>Salvia argentea</i> L.
<i>Phrydiuchus tau</i> Warner [26] -----	<i>Salvia aethiopis</i> L.
<i>Phyllobius</i> sp. -----	<i>Cirsium vulgare</i> (Savi) Tenore
<i>Rhinocyllus conicus</i> (Froelich) [26, 28] -----	<i>Centaurea jacea</i> L. <i>Centaurea</i> sp. <i>Silybum marianum</i> (L.) Gaertner
<i>Sibinia attalica</i> (Gyllenhal) -----	<i>Centaurea amara</i> L. <i>Centaurea caerulea</i> Willdenow
<i>Sitona gressorius</i> (Fabricius) [28] -----	<i>Cirsium vulgare</i> (Savi) Tenore
<i>Sitona lineatus</i> (L.) [28] -----	<i>Senecio jacobaea</i> L.
<i>Sitona puncticollis</i> Stephens -----	<i>Senecio aquaticus</i> Hill

See footnotes at end of table.

Table 1. —*Taxonomic list of insects and associated weedy plants*—Continued

<i>Insect</i> ¹	<i>Associated plant</i>
COLEOPTERA —Continued	
Curculionidae —Continued	
<i>Sitona</i> sp. [26, 28] -----	<i>Centaurea jacea</i> L. <i>Cirsium arvense</i> (L.) Scopoli <i>Cirsium vulgare</i> (Savi) Tenore <i>Cynara scolymus</i> L. <i>Echinops sphaerocephalus</i> L. <i>Onopordum tauricum</i> Willdenow
<i>Sitophilus</i> sp. [28] -----	<i>Cynara scolymus</i> L.
<i>Strophomorphus porcellus</i> (Schonherr) [26] -----	<i>Echinops sphaerocephalus</i> L.
<i>Tychius quinquepunctatus</i> (L.) -----	<i>Cirsium arvense</i> (L.) Scopoli
Elateridae	
<i>Cardiophorus</i> near <i>nigerrimus</i> Erichson [20] -----	<i>Linaria</i> sp.
Lathridiidae	
<i>Corticaria</i> sp. [13] -----	<i>Centaurea maculosa</i> Lamarck <i>Cirsium arvense</i> (L.) Scopoli
Meloidae	
<i>Mylabris apicipennis</i> Reiche [20] -----	<i>Linaria</i> sp.
<i>Mylabris</i> sp. [20] -----	Do.
Melyridae	
<i>Aplocnemus</i> sp. [13] -----	Do.
<i>Attalus</i> sp. [13, 25] -----	<i>Centaurea napifolia</i> L. <i>Centaurea repens</i> L. <i>Linaria vulgaris</i> Miller
<i>Colotes</i> sp. [13] -----	<i>Linaria</i> sp.
<i>Danacaea</i> sp. [13, 25] -----	<i>Centaurea calcitrapa</i> L.
Probably <i>Danacaea</i> sp. [13] -----	<i>Linaria vulgaris</i> Miller <i>Linaria</i> sp.
<i>Divales bipustulata</i> Fabricius [13] -----	<i>Centaurea caerulea</i> Willdenow
<i>Divales</i> sp. [13] -----	Do.
<i>Julistus</i> sp. [13] -----	<i>Linaria heterophylla</i> Desfontaines
<i>Malachius aeneus</i> L. [13, 25] -----	<i>Tamarix</i> sp.
<i>Malachius</i> sp. [13, 25] -----	Do.
<i>Psilothrix</i> sp. [13, 25] -----	<i>Centaurea sphaerocephala</i> L.
Mordellidae	
<i>Anaspis</i> sp. [20] -----	<i>Cytisus scoparius</i> (L.) Link
<i>Mordellistena</i> sp. [20] -----	<i>Centaurea nicaeensis</i> Allioni
Nitidulidae	
<i>Brachypterolus pulicarius</i> (L.) [32] -----	<i>Linaria dalmatica</i> (L.) Miller <i>Linaria fastigiata</i> Chavannes <i>Linaria genistifolia</i> (L.) Miller <i>Linaria grandiflora</i> Desfontaines <i>Linaria heterophylla</i> Desfontaines <i>Linaria kurdica</i> Boissier & Hohenacker <i>Linaria lineolata</i> Boissier <i>Linaria vulgaris</i> Miller <i>Linaria</i> sp.
<i>Brachypterolus</i> sp. [32] -----	<i>Linaria genistifolia</i> (L.) Miller <i>Linaria vulgaris</i> Miller
<i>Eपुरaea</i> sp. [32] -----	<i>Cirsium arvense</i> (L.) Scopoli
<i>Meligethes incanus</i> Sturm [32] -----	<i>Centaurea maculosa</i> Lamarck <i>Salvia aethiops</i> L.
<i>Meligethes</i> sp. [32] -----	<i>Cirsium arvense</i> (L.) Scopoli
Oedemeridae	
<i>Oedemera podagrariae</i> (L.) [30] -----	<i>Onopordum</i> sp.

See footnotes at end of table.

Table 1. — *Taxonomic list of insects and associated weedy plants*—Continued

<i>Insect</i> ¹	<i>Associated plant</i>
COLEOPTERA —Continued	
Orthoperidae	
<i>Arthrolips</i> sp. [9] -----	<i>Tribulus terrestris</i> L.
Phalacridae	
<i>Olibrus corticalis</i> (Panzer) [13] -----	<i>Senecio jacobaea</i> L.
Ptinidae	
<i>Ptinus villiger</i> (Reitter) [20] -----	<i>Centaurea cineraria</i> L.
Scarabaeidae	
<i>Glaphyrus</i> sp. [9] -----	<i>Onopordum</i> sp.
<i>Leucocelis</i> sp. [9] -----	<i>Linaria</i> sp.
<i>Valgus hemipterus</i> L. [9] -----	<i>Tamarix</i> sp.
Scolytidae	
<i>Phloeotribus rhododactylus</i> (Marsham) [1] -----	<i>Cytisus scoparius</i> (L.) Link
DIPTERA	
Agromyzidae	
<i>Liriomyza latigenis</i> (Hendel) -----	<i>Senecio jacobaea</i> L.
<i>Liriomyza strigata</i> (Meigen) -----	<i>Senecio aquaticus</i> Hill
<i>Melanagromyza aeneoventris</i> (Fallén) -----	<i>Senecio jacobaea</i> L.
<i>Melanagromyza dettmeri</i> Hering -----	<i>Senecio aquaticus</i> Hill
<i>Melanagromyza eupatorii</i> Spencer -----	<i>Senecio jacobaea</i> L.
<i>Melanagromyza near tripolii</i> Spencer [21] -----	<i>Senecio aquaticus</i> Hill
<i>Ophiomyia senecionina</i> Hering -----	<i>Senecio jacobaea</i> L.
<i>Phytomyza</i> probably <i>horticola</i> Goureau [21] -----	<i>Centaurea calcitrapa</i> L.
	<i>Linaria</i> sp.
Anthomyiidae	
<i>Hylemya brassicae</i> (Wiedemann) [21] -----	<i>Senecio jacobaea</i> L.
<i>Hylemya cinerella</i> (Fallén) [21] -----	Do.
<i>Hylemya coarctata</i> (Fallén) [21] -----	Do.
<i>Hylemya platura</i> (Meigen) [21] -----	Do.
<i>Hylemya pullula</i> (Zetterstedt) [21] -----	Do.
<i>Hylemya radicum</i> (L.) [21] -----	<i>Carthamus tinctorius</i> L.
	<i>Senecio jacobaea</i> L.
<i>Hylemya seneciella</i> (Meade) [21] -----	Do.
<i>Hylemya</i> sp. [21] -----	<i>Tamarix</i> sp.
Anthomyzidae	
<i>Anthomyza gracilis</i> Fallén [18] -----	<i>Centaurea jacea</i> L.
Calliphoridae	
<i>Bufolucilia silvarum</i> (Meigen) -----	<i>Senecio jacobaea</i> L.
Chamaemyiidae	
<i>Leucopis</i> sp. [18, 21] -----	<i>Centaurea nicaeensis</i> Allioni
	<i>Linaria</i> sp.
Chloropidae	
<i>Oscinella frit</i> (L.) [18] -----	<i>Centaurea jacea</i> L.
<i>Oscinella</i> sp. [18] -----	<i>Linaria genistifolia</i> (L.) Miller
<i>Polydodaspis ruficornis</i> (Macquart) [18] -----	<i>Centaurea jacea</i> L.
<i>Thaumatomyia sulcifrons</i> (Becker) [18] -----	<i>Centaurea repens</i> L.
Drosophilidae	
<i>Drosophila funebris</i> (Fabricius) [29] -----	<i>Cynara scolymus</i> L.
Empididae	
<i>Microphorus</i> sp. [14] -----	<i>Tamarix</i> sp.
<i>Platypalpus</i> sp. [14, 21] -----	<i>Linaria grandiflora</i> Desfontaines
	<i>Tamarix</i> sp.

See footnotes at end of table.

Table 1. —*Taxonomic list of insects and associated weedy plants*—Continued

<i>Insect</i> ¹	<i>Associated plant</i>
DIPTERA —Continued	
Lauxaniidae	
<i>Minettia plumicornis</i> (Fallén) [21] -----	<i>Tamarix</i> sp.
Lonchopteridae	
<i>Lonchoptera furcata</i> (Fallén) [29] -----	<i>Centaurea nicaeensis</i> Allioni
Milichiidae	
<i>Desmometopa</i> near <i>m-nigrum</i> (Zetterstedt) [18] -----	<i>Tamarix</i> sp.
Muscidae	
<i>Fannia</i> sp. [21] -----	<i>Senecio jacobaea</i> L.
<i>Orthellia caesarion</i> (Meigen) [7] -----	<i>Tamarix</i> sp.
Otitidae	
<i>Timia xanthaspis</i> (Loew) -----	<i>Centaurea repens</i> L.
Phoridae	
<i>Phora</i> sp. [29] -----	<i>Cirsium arvense</i> (L.) Scopoli
Sarcophagidae	
<i>Sarcophaga balanina</i> Pandellé [7] -----	<i>Tribulus terrestris</i> L.
<i>Sarcophaga</i> sp. [7] -----	<i>Centaurea jacea</i> L.
Sphaeroceridae	
<i>Leptocera</i> sp. [18, 21] -----	<i>Linaria genistifolia</i> (L.) Miller
Stratiomyidae	
<i>Nemotelus</i> sp. [29] -----	<i>Linaria</i> sp.
Syrphidae	
<i>Eumerus strigatus</i> Fallén -----	<i>Centaurea repens</i> L.
<i>Eumerus</i> sp. -----	<i>Senecio jacobaea</i> L.
<i>Paragus</i> sp. [23] -----	<i>Linaria</i> sp.
<i>Sphaerophoria rueppelli</i> Wiedemann [23] -----	<i>Senecio jacobae</i> L.
Tachinidae	
<i>Voria ruralis</i> (Fallén) [18] -----	<i>Cynara cardunculus</i> L.
Tephritidae	
<i>Acanthiophilus helianthi</i> (Rossi) [6, 21] -----	<i>Carthamus lanatus</i> L. <i>Centaurea amara</i> L. <i>Centaurea caerulea</i> Willdenow <i>Centaurea calcitrapa</i> L. <i>Centaurea jaceae</i> L. <i>Centaurea maculosa</i> Lamarck <i>Centaurea napifolia</i> L. <i>Centaurea nicaeensis</i> Allioni <i>Centaurea paniculata</i> L. <i>Centaurea repens</i> L. <i>Cynara scolymus</i> L. <i>Onopordum</i> sp.
<i>Chaetorellia</i> sp. [6, 21] -----	<i>Carthamus tinctorius</i> L. <i>Centaurea amara</i> L. <i>Centaurea jaceae</i> L.
<i>Chaetostomella onotrophes</i> (Loew) [6] -----	Do. <i>Centaurea nigra</i> L. <i>Centaurea phrygia</i> L. <i>Centaurea scabiosa</i> L. <i>Centaurea</i> sp. <i>Cirsium arvense</i> (L.) Scopoli
<i>Orellia colon</i> (Meigen) [21] -----	<i>Centaurea scabiosa</i> L.
<i>Orellia</i> near <i>colon</i> (Meigen) [6] -----	<i>Carthamus lanatus</i> L.
<i>Orellia falcata</i> (Scopoli) [6] -----	<i>Centaurea jaceae</i> L.

See footnotes at end of table.

Table 1. — *Taxonomic list of insects and associated weedy plants*—Continued

<i>Insect</i> ¹	<i>Associated plant</i>
DIPTERA —Continued	
Tephritidae —Continued	
<i>Orellia lappae</i> (Cederhjelms) [6, 21] -----	<i>Onopordum tauricum</i> Willdenow
	<i>Onopordum</i> sp.
<i>Orellia punctata</i> (Schrank) [6] -----	<i>Centaurea schaeerocephala</i> L.
<i>Orellia</i> near <i>punctata</i> (Schrank) [6] -----	<i>Centaurea nicaeensis</i> Allioni
<i>Orellia</i> sp. [6] -----	<i>Centaurea scabiosa</i> L.
<i>Oxya nebulosa</i> (Wiedemann) [21] -----	<i>Senecio jacobaea</i> L.
<i>Paroxyna</i> probably <i>tessellata</i> (Loew) -----	Do.
<i>Sphenella marginata</i> (Fallén) [21] -----	Do.
<i>Tephritis postica</i> (Loew) [6] -----	<i>Onopordum tauricum</i> Willdenow
	<i>Onopordum</i> sp.
<i>Terellia fuscicornis</i> (Loew) -----	<i>Cynara scolymus</i> L.
<i>Terellia longicauda</i> (Meigen) [6] -----	<i>Cirsium vulgare</i> (Savi) Tenore
<i>Terellia serratae</i> (L.) [6, 21] -----	<i>Centaurea</i> sp.
<i>Terellia virens</i> (Loew) [21] -----	<i>Centaurea maculosa</i> Lamarck
<i>Terellia</i> near <i>virens</i> (Lowe) [6] -----	<i>Onopordum</i> sp.
<i>Trupanea stellata</i> (Fuessly) [21] -----	<i>Senecio jacobaea</i> L.
	<i>Senecio jacobaea</i> L.?
<i>Urophora affinis</i> (Frauenfeld) [6, 21] -----	<i>Centaurea maculosa</i> Lamarck
<i>Urophora cuspidata</i> (Meigen) [6] -----	<i>Centaurea scabiosa</i> L.
<i>Urophora jaceana</i> (Hering) [6] -----	<i>Centaurea nigra</i> L.
<i>Urophora quadrifasciata</i> (Meigen) [6, 21] -----	<i>Centaurea jacea</i> L.
	<i>Centaurea maculosa</i> Lamarck
<i>Urophora</i> probably <i>quadrifasciata</i> (Meigen) [6, 21] -----	<i>Centaurea amara</i> L.
	<i>Centaurea calcitrapa</i> L.
	<i>Centaurea diffusa</i> Lamarck
	<i>Centaurea jacea</i> L.
	<i>Centaurea maculosa</i> Lamarck
	<i>Centaurea nicaeensis</i> Allioni
	<i>Centaurea scabiosa</i> L.
<i>Urophora stylata</i> (Fabricius) [6, 21] -----	<i>Cirsium arvense</i> (L.) Scopoli
	<i>Cirsium vulgare</i> (Savi) Tenore
	<i>Cirsium</i> sp.
Trioxoscelidae	
<i>Trioxoscelis frontalis</i> (Fallén) [21] -----	<i>Tamarix</i> sp.
<i>Trioxoscelis obscurella</i> (Fallén) [21] -----	Do.
HEMIPTERA	
Anthocoridae	
<i>Anthocoris nemorum</i> (L.) [11] -----	<i>Linaria</i> sp.
Berytidae	
<i>Berytinus</i> sp. [11] -----	<i>Scrophularia canina</i> L.
Coreidae	
<i>Enoplops discigera</i> (Kolenati) [11] -----	<i>Linaria</i> sp.
<i>Mesocerus marginatus</i> (L.) ? [11] -----	<i>Onopordum</i> sp.
	<i>Scrophularia canina</i> L.
<i>Strobilotoma typhaecornis</i> (Fabricius) [11] -----	Do.
Lygaeidae	
<i>Cymus glandicolor</i> Hahn [11] -----	<i>Linaria vulgaris</i> Miller
<i>Geocoris megacephalus sculus</i> (Fieber) [11] -----	<i>Salsola</i> sp.
<i>Heterogaster urticae</i> (Fabricius) [11] -----	<i>Scrophularia canina</i> L.
<i>Lygaeus equestris</i> (L.) [11] -----	<i>Linaria</i> sp.
<i>Sphragisticus nebulosus</i> (Fallén) [11] -----	<i>Salvia virgata</i> Jacquin
<i>Spilostethus saxatilis</i> (Scopoli) [11] -----	<i>Linaria</i> sp.
Miridae	
<i>Adelphocoris lineolatus</i> (Goeze) [39] -----	Do.

See footnotes at end of table.

Table 1. —*Taxonomic list of insects and associated weedy plants*—Continued

<i>Insect</i> ¹	<i>Associated plant</i>
HEMIPTERA —Continued	
Miridae —Continued	
<i>Adelphocoris</i> sp. [39] -----	Do.
<i>Alloeonotus fulvipes</i> (Scopoli) [39] -----	Do.
<i>Brachycoleus decolor</i> Reuter [11, 39] -----	Do.
<i>Deraeocoris schach</i> (Fabricius) [11] -----	<i>Onopordum tauricum</i> Willdenow
<i>Lygus prantensis</i> (L.) [39] -----	<i>Linaria</i> sp.
<i>Lygus rugulipennis</i> Poppius [39] -----	Do.
<i>Polymerus</i> sp. [39] -----	Do.
Nabidae	
<i>Nabis viridulus</i> Spinola [39] -----	<i>Tamarix</i> sp.
Pentatomidae	
<i>Carpocoris lunulatus</i> (Goeze) [39] -----	<i>Linaria</i> sp.
<i>Carpocoris mediterraneus</i> Taminini [11, 39] -----	Do.
	<i>Silybum marianum</i> (L.) Gaertner
<i>Carpocoris pudicus</i> (Poda) [39] -----	<i>Linaria</i> sp.
<i>Dolycoris baccarum</i> (L.) [11, 39] -----	Do.
	<i>Onopordum</i> sp.
	<i>Tamarix</i> sp.
<i>Eurydema ornatum</i> (L.) [11, 39] -----	<i>Linaria dalmatica</i> (L.) Miller
<i>Eurygaster maura</i> (L.) [39] -----	<i>Linaria</i> sp.
<i>Eysarcoris inconspicuus</i> (Herrich-Schäffer) [11] -----	Do.
<i>Holcostethus strictus</i> (Fabricius) [11] -----	<i>Linaria vulgaris</i> Miller
<i>Holcostethus</i> sp. [11] -----	<i>Centaurea repens</i> L.
<i>Nezara viridula</i> (L.) [11, 39] -----	<i>Linaria dalmatica</i> (L.) Miller
<i>Palomena prasina</i> L. [11] -----	<i>Onopordum</i> sp.
Phymatidae	
<i>Phymata crassipes</i> (Fabricius) ? [11] -----	<i>Scrophularia canina</i> L.
Podopidae	
<i>Ancyrosoma leucogrammmum</i> (Gmelin) [11] -----	Do.
<i>Graphosoma lineata</i> (L.) [11] -----	<i>Onopordum</i> sp.
Reduviidae	
<i>Rhinocoris iracundus</i> Poda [39] -----	<i>Linaria</i> sp.
Rhopalidae	
<i>Corizus hyoscyami</i> L. [11] -----	Do.
<i>Rhopalus</i> sp. [11] -----	Do.
<i>Stictopleurus punctatonervosus</i> (Goeze) -----	<i>Cirsium arvense</i> (L.) Scopoli
Tingidae	
<i>Dictyla echii</i> (Schränk) [39] -----	<i>Linaria</i> sp.
HOMOPTERA	
Cercopidae	
<i>Cercopis vulnerata</i> Rossi [15] -----	<i>Onopordum tauricum</i> Willdenow
<i>Philaenus spumarius</i> (L.) [15, 39] -----	<i>Cirsium arvense</i> (L.) Scopoli
	<i>Onopordum tauricum</i> Willdenow
	<i>Senecio aquaticus</i> Hill
Cicadellidae	
<i>Circulifer opacipennis</i> (Lethierry) [15] -----	<i>Centaurea repens</i> L.
<i>Deltocephalus</i> sp. [15] -----	Do.
<i>Handianus</i> sp. [15] -----	Do.
<i>Hephathus nanus</i> (Herrich-Schäffer) [15] -----	<i>Centaurea calcitrapa</i> L.
Cicadidae	
<i>Cicadatra</i> near <i>hyalina</i> (Fabricius) [39] -----	<i>Linaria</i> sp.

See footnotes at end of table.

Table 1. — *Taxonomic list of insects and associated weedy plants*—Continued

<i>Insect</i> ¹	<i>Associated plant</i>
HOMOPTERA —Continued	
Cixiidae	
<i>Hyalesthes obsoletus</i> Signoret [15] -----	<i>Centaurea repens</i> L.
<i>Oliarus barajus</i> Dlabola [15] -----	Do.
Issidae	
<i>Hysteropterum grylloides</i> (Fabricius) [15] -----	<i>Centaurea calcitrapa</i> L.
Tettigometridae	
<i>Tettigometra griseola</i> Fieber [15] -----	<i>Centaurea repens</i> L.
<i>Tettigometra</i> sp. [15] -----	Do.
HYMENOPTERA	
Anthophoridae	
<i>Ceratina</i> sp. [2] -----	<i>Tamarix</i> sp.
Braconidae	
<i>Apanteles</i> sp. [16, 33] -----	<i>Senecio jacobaea</i> L.
<i>Biosteres carbonaris</i> (Nees) [16] -----	<i>Cynara scolymus</i> L.
<i>Bracon</i> near <i>osculator</i> Nees [16] -----	<i>Linaria</i> sp.
<i>Bracon</i> sp. [16] -----	<i>Centaurea maculosa</i> Lamarck
	<i>Cynara scolymus</i> L.
	<i>Linaria vulgaris</i> Miller
	<i>Senecio aquaticus</i> Hill
	<i>Senecio jacobaea</i> L.
<i>Chelonus</i> sp. [16] -----	<i>Linaria vulgaris</i> Miller
<i>Dacnusa leptogaster</i> Haliday -----	Do.
<i>Microplitis</i> possibly <i>scrophulariae</i> Szelenyi [16] -----	<i>Linaria</i> sp.
<i>Microplitis</i> possibly <i>variipes</i> Ruthe [16] -----	Do.
<i>Opius</i> sp. [16] -----	<i>Senecio jacobaea</i> L.
<i>Orgilus</i> sp. [16] -----	Do.
Cynipidae	
<i>Diglyphosema</i> sp. [17] -----	Do.
<i>Eutrias</i> sp. [17] -----	Do.
<i>Isocolus scabiosae</i> (Giraud) [34] -----	<i>Centaurea amara</i> L.
	<i>Centaurea caerulea</i> Willdenow
	<i>Centaurea cineraria</i> L.
	<i>Centaurea napifolia</i> L.
	<i>Centaurea phrygia</i> L.
	<i>Centaurea scabiosa</i> L.
Diapriidae	
<i>Psilus</i> sp. [16] -----	<i>Senecio jacobaea</i> L.
Eulophidae	
<i>Entedon</i> sp. [3, 8] -----	<i>Linaria</i> sp.
Eupelmidae	
<i>Eupelmus</i> sp. [3] -----	Do.
Eurytomidae	
<i>Eudecatoma biguttata</i> Swederus or <i>E. submutica</i> (Thomson) [3] -----	<i>Centaurea caerulea</i> Willdenow
	<i>Centaurea jacea</i> L.
	<i>Centaurea napifolia</i> L.
	<i>Centaurea nicaeensis</i> Allioni
<i>Eudecatoma submutica</i> (Thomson) [3] -----	<i>Centaurea caerulea</i> Willdenow
	<i>Centaurea jacea</i> L.
	<i>Centaurea napifolia</i> L.
	<i>Centaurea nicaeensis</i> Allioni

See footnotes at end of table.

Table 1. —*Taxonomic list of insects and associated weedy plants—Continued*

<i>Insect</i> ¹	<i>Associated plant</i>
HYMENOPTERA—Continued	
Eurytomidae—Continued	
<i>Eurytoma robusta</i> Mayr [3] -----	<i>Carthamus lanatus</i> L. <i>Centaurea caerulea</i> Willdenow <i>Centaurea jacea</i> L. <i>Centaurea nicaeensis</i> Allioni <i>Centaurea phrygia</i> L. <i>Centaurea scabiosa</i> L. <i>Centaurea</i> sp. <i>Cirsium arvense</i> (L.) Scopoli <i>Cirsium vulgare</i> (Savi) Tenore <i>Onopordum</i> sp.
<i>Eurytoma robusta</i> Mayr or <i>E. tibialis</i> Boheman [3] -----	<i>Echinops sphaerocephalus</i> L.
<i>Eurytoma tibialis</i> Boheman [8] -----	<i>Centaurea caerulea</i> Willdenow <i>Centaurea calcitrapa</i> L. <i>Centaurea jacea</i> L. <i>Centaurea maculosa</i> Lamarck <i>Centaurea nicaeensis</i> Allioni <i>Centaurea phrygia</i> L. <i>Centaurea scabiosa</i> L. <i>Cirsium arvense</i> (L.) Scopoli <i>Cirsium vulgare</i> (Savi) Tenore
<i>Eurytoma</i> sp. [3] -----	<i>Linaria</i> sp.
Formicidae	
<i>Camponotus lateralis</i> (Olivier) [19] -----	<i>Linaria</i> sp.
<i>Cataglyphis</i> near <i>cursor</i> (Fonscolombe) [19] -----	Do.
<i>Formica</i> near <i>nasuta</i> Nylander [19] -----	Do.
<i>Formica</i> sp. [19] -----	Do.
<i>Tapinoma</i> sp. [19] -----	Do.
Mymaridae	
<i>Anaphes</i> sp. [3] -----	Do.
Ormyridae	
<i>Ormyrus gratus</i> (Foerster) [3] -----	<i>Centaurea caerulea</i> Willdenow <i>Centaurea calcitrapa</i> L.
<i>Ormyrus punctiger</i> Westwood [3] -----	<i>Centaurea amara</i> L. <i>Centaurea caerulea</i> Willdenow <i>Centaurea jacea</i> L. <i>Centaurea maculosa</i> Lamarck <i>Centaurea nicaeensis</i> Allioni <i>Cirsium arvense</i> (L.) Scopoli <i>Onopordum</i> sp.
Pteromalidae	
<i>Caenacis</i> sp. [3] -----	<i>Centaurea</i> sp.
<i>Spintherus</i> sp. [3] -----	<i>Linaria</i> sp.
Scelionidae	
<i>Telenomus</i> sp. [16] -----	Do.
LEPIDOPTERA	
Arctiidae	
<i>Tyria jacobaeae</i> (L.) -----	<i>Senecio jacobaeae</i> L.
Cochylidae	
<i>Cochylis</i> probably <i>atricapitana</i> (Stephens) -----	<i>Senecio aquaticus</i> Hill <i>Senecio jacobaeae</i> L.
<i>Cochylis</i> near <i>hybridella</i> (Hübner) [35] -----	<i>Cirsium arvense</i> (L.) Scopoli
<i>Cochylis posterana</i> (Zeller) -----	<i>Centaurea calcitrapa</i> L. <i>Onopordum</i> sp.

See footnotes at end of table.

Table 1. — *Taxonomic list of insects and associated weedy plants*—Continued

<i>Insect</i> ¹	<i>Associated plant</i>
LEPIDOPTERA —Continued	
Coleophoridae	
<i>Coleophora</i> sp. [12, 35] -----	<i>Centaurea nicaeensis</i> Allioni <i>Salsola kali</i> L.
Cosmopterigidae	
<i>Pyroderces argyrogrammos</i> (Zeller) [12] -----	<i>Carthamus lanatus</i> L. <i>Centaurea amara</i> L. <i>Centaurea calcitrapa</i> L. <i>Centaurea sphaerocephala</i> L. <i>Cirsium arvense</i> (L.) Scopoli <i>Cynara scolymus</i> L. <i>Galactites tomentosa</i> Moench <i>Onopordum</i> sp. <i>Silybum marianum</i> (L.) Gaertner
<i>Stigmatophora serratella</i> (Treitschke) [12] -----	<i>Linaria dalmatica</i> (L.) Miller <i>Linaria repens</i> (L.) Miller <i>Linaria vulgaris</i> Miller <i>Linaria</i> sp.
Geometridae	
<i>Chlorissa</i> sp. -----	<i>Senecio aquaticus</i> Hill
<i>Ematurga atomaria</i> (L.) [24] -----	<i>Senecio jacobaea</i> L.
<i>Eupithecia absinthiata</i> (Clerck) [12] -----	Do.
<i>Eupithecia centaurearia</i> (Denis & Schiffermüller) [24] -----	<i>Senecio aquaticus</i> Hill <i>Senecio jacobaea</i> L.
<i>Eupithecia linariata</i> (Denis & Schiffermüller) [24] -----	<i>Linaria vulgaris</i> Miller
<i>Eupithecia</i> sp. [5] -----	<i>Cirsium vulgare</i> (Savi) Tenore
<i>Gymnoscelis pumilata</i> (Hübner) [25] -----	<i>Linaria vulgaris</i> Miller
Lyonetiidae	
<i>Leucoptera spartifoliella</i> (Hübner) -----	<i>Cytisus scoparius</i> (L.) Link
Noctuidae	
<i>Calophasia casta</i> (Borkhausen) [24] -----	<i>Linaria dalmatica</i> (L.) Miller <i>Linaria</i> sp.
<i>Heliothis peltiger</i> (Denis & Schiffermüller) [24] -----	<i>Centaurea calcitrapa</i> L. <i>Salvia limbata</i> C. A. von Meyer
<i>Heliothis</i> sp. [24] -----	<i>Linaria</i> sp.
<i>Peridroma saucia</i> (Hübner) [24] -----	<i>Senecio squalidus</i> L.
<i>Phytometra</i> sp. [24] -----	<i>Salvia verbenaca</i> L.
<i>Porphyrinia parva</i> (Hübner) [24] -----	<i>Carthamus lanatus</i> L. <i>Centaurea amara</i> L. <i>Centaurea calcitrapa</i> L. <i>Centaurea napifolia</i> L.
<i>Porphyrinia purpurina</i> (Denis & Schiffermüller) [24] -----	<i>Cirsium odontolepis</i> Boissier
<i>Prodotis stolidus</i> (Fabricius) [24] -----	<i>Centaurea amara</i> L. <i>Cynara scolymus</i> L.
Nymphalidae	
<i>Cynthia cardui</i> (L.) [37] -----	<i>Salvia palaestina</i> Benth
<i>Melitaea cinxia</i> (L.) [37] -----	<i>Silybum marianum</i> (L.) Gaertner <i>Cynara scolymus</i> L.
<i>Melitaea didyma</i> (Esper) [37] -----	<i>Linaria vulgaris</i> Miller <i>Linaria</i> sp.
Oecophoridae	
<i>Depressaria</i> sp. -----	<i>Centaurea cineraria</i> L.
Plutellidae	
<i>Plutella xylostella</i> (L.) [12] -----	<i>Linaria</i> sp.

See footnotes at end of table.

Table 1. —*Taxonomic list of insects and associated weedy plants*—Continued

<i>Insect</i> ¹	<i>Associated plant</i>
LEPIDOPTERA —Continued	
Pyralidae	
<i>Gymnancyla canella</i> (Denis & Schiffermüller) -----	<i>Salsola kali</i> L.
<i>Homeosoma</i> near <i>nebulella</i> (Denis & Schiffermüller) -----	<i>Cirsium vulgare</i> (Savi) Tenore
<i>Homeosoma</i> sp. [36] -----	<i>Cynara scolymus</i> L.
<i>Myelois cribrella</i> (Hübner) [36] -----	<i>Carthamus lanatus</i> L.
<i>Myelois</i> sp. [36] -----	<i>Onopordum tauricum</i> Willdenow
<i>Palpita unionalis</i> (Hübner) [4] -----	<i>Linaria vulgaris</i> Miller
Probably <i>Phycitodes albatella</i> (Ragonot) -----	<i>Senecio jacobaea</i> L.
<i>Phycitodes carlinella</i> Heinemann -----	<i>Senecio aquaticus</i> Hill
Sesiidae	
<i>Chamaesphecia empiformis</i> (Esper) -----	<i>Euphorbia esula</i> L.
Sphingidae	
<i>Hyles euphorbiae</i> (L.) [12] -----	<i>Euphorbia</i> sp.
Tortricidae	
<i>Cacoecimorpha pronubana</i> (Hübner) [12] -----	<i>Cynara scolymus</i> L.
	<i>Senecio ercifolius</i> L.
	<i>Senecio nemorensis</i> L.
<i>Cnephasia</i> sp. [12] -----	<i>Centaurea napifolia</i> L.
	<i>Silybum marianum</i> (L.) Gaertner
<i>Epiblema</i> near <i>pflugiana</i> (Fabricius) -----	<i>Cirsium vulgare</i> (Savi) Tenore
<i>Eucosma campoliliana</i> (Denis & Schiffermüller) ? -----	<i>Senecio jacobaea</i> L.
<i>Exartema</i> sp. [35] -----	Do.
Zygaenidae	
<i>Adscita</i> sp. [12] -----	<i>Cirsium vulgare</i> (Savi) Tenore
NEUROPTERA	
Chrysopidae	
<i>Chrysopa</i> near <i>carnea</i> Stephens [38] -----	<i>Linaria</i> sp.
ORTHOPTERA	
Tettigoniidae	
<i>Tettigonia caudata</i> (Charpentier) [10] -----	Do.

¹ Insects are listed alphabetically by order and family.² The numbers in brackets following the scientific name refer to the numbers in the List of Contributors, p. iv., and signify the person or persons who provided the identification. Where no numbers are given, the identifier is not known.

Table 2.—Selected weedy plants and associated insects, extent of their association, and country of origin

<i>Plant and insect</i> ¹	<i>Insect-plant relationship</i> ²	<i>Country</i>
Arctium minus Bernhardi:		
<i>Cleonus piger</i> (Scopoli) [Curculionidae, CO] -----	Reared from root -----	Italy.
Boreava sp.:		
<i>Cartallum ebulinum</i> (L.) [Cerambycidae, CO] -----	Sweapt from plant -----	Turkey.
<i>Phyllotreta</i> sp. [Chrysomelidae, CO] -----	do -----	Do.
Carlina corymbosa L.:		
<i>Larinus ursus</i> (Fabricius) [Curculionidae, CO] -----	Feeding on head -----	Italy.
Carlina lanata L.:		
<i>Larinus ursus</i> (Fabricius) [Curculionidae, CO] -----	Reared from head -----	Do.
Carlina vulgaris L.:		
<i>Larinus ursus</i> (Fabricius) [Curculionidae, CO] -----	do -----	Do.
<i>Larinus ursus</i> (Fabricius) [Curculionidae, CO] -----	Feeding on plant -----	Do.
Carthamus lanatus L.:		
<i>Acanthophilus helianthi</i> (Rossi) [Tephritidae, DI] -----	Reared from head -----	Do.
<i>Eurytoma robusta</i> Mayr [Eurytomidae, HY] -----	do -----	Do.
<i>Larinus flavescens</i> Germar [Curculionidae, CO] -----	do -----	Do.
<i>Larinus flavescens</i> Germar [Curculionidae, CO] -----	Feeding on head -----	Do.
<i>Larinus jaceae</i> (Fabricius) [Curculionidae, CO] -----	Reared from head -----	Do.
<i>Larinus jaceae</i> (Fabricius) [Curculionidae, CO] -----	Feeding on head -----	Do.
<i>Larinus rusticanus</i> Gyllenhal [Curculionidae, CO] -----	Resting on head -----	Do.
<i>Larinus rusticanus</i> Gyllenhal [Curculionidae, CO] -----	Reared from head -----	Do.
<i>Myelois cribrella</i> (Hübner) [Pyrilidae, LE] -----	do -----	Do.
<i>Orellia near colon</i> (Meigen) [Tephritidae, DI] -----	do -----	Do.
<i>Porphyrinia parva</i> (Hübner) [Noctuidae, LE] -----	do -----	Do.
<i>Pyroderces argyrogrammos</i> (Zeller) [Cosmopterigidae, LE] -----	do -----	Do.
Carthamus tinctorius L.:		
<i>Chaetorellia</i> sp. [Tephritidae, DI] -----	do -----	Israel.
<i>Hylemya radicum</i> (L.) [Anthomyiidae, DI] -----	Swept from plant -----	Italy.
Centaurea amara L.:		
<i>Acanthophilus helianthi</i> (Rossi) [Tephritidae, DI] -----	Reared from head -----	Do.
<i>Apion detritum</i> Rey [Curculionidae, CO] -----	Reared from plant -----	Do.
<i>Chaetorellia</i> sp. [Tephritidae, DI] -----	do -----	Do.
<i>Isocolus scabiosae</i> (Giraud) [Cynipidae, HY] -----	Reared from head -----	Do.
<i>Larinus planus</i> (Fabricius) [Curculionidae, CO] -----	do -----	Do.
<i>Lasioderma</i> prob. <i>obscurum</i> Solsky [Anobiidae, CO] -----	do -----	Do.
<i>Ormyrus punctiger</i> Westwood [Ormyridae, HY] -----	do -----	Do.
<i>Porphyrinia parva</i> (Hübner) [Noctuidae, LE] -----	do -----	Do.
<i>Porphyrinia parva</i> (Hübner) [Noctuidae, LE] -----	Reared from plant -----	Do.
<i>Prodotis stolidus</i> (Fabricius) [Noctuidae, LE] -----	Reared from foliage -----	Do.
<i>Pyroderces argyrogrammos</i> (Zeller) [Cosmopterigidae, LE] -----	Reared from head -----	Do.
<i>Scymnus</i> sp. [Coccinellidae, CO] -----	On plant -----	Do.
<i>Sibinia attalica</i> (Gyllenhal) [Curculionidae, CO] -----	Reared from head -----	Do.
<i>Urophora</i> prob. <i>quadrifasciata</i> (Meigen) [Tephritidae, DI] -----	do -----	Do.
Centaurea caerulea Willdenow:		
<i>Acanthophilus helianthi</i> (Rossi) [Tephritidae, DI] -----	do -----	Iran.
<i>Divales bipustulata</i> Fabricius [Melyridae, CO] -----	Resting on plant -----	Italy.
<i>Divales</i> sp. [Melyridae, CO] -----	do -----	Do.
<i>Eudecatoma biguttata</i> Swederus or <i>E. submutica</i> (Thomson)		
[Eurytomidae, HY] -----	Reared from head -----	Do.
<i>Eudecatoma submutica</i> (Thomson) [Eurytomidae, HY] -----	do -----	Do.
<i>Eurytoma robusta</i> Mayr [Eurytomidae, HY] -----	do -----	Do.
<i>Eurytoma tibialis</i> Boheman [Eurytomidae, HY] -----	do -----	Do.
<i>Isocolus scabiosae</i> (Giraud) [Cynipidae, HY] -----	do -----	Do.

See footnotes at end of table.

Table 2.—Selected weedy plants and associated insects, extent of their association, and country of origin—Continued

<i>Plant and insect</i> ¹	<i>Insect-plant relationship</i> ²	<i>Country</i>
<i>Centaurea caerulea</i> Willdenow:—Continued		
<i>Ormyrus graciosus</i> (Foerster) [Ormyridae, HY]	do	Do.
<i>Ormyrus punctiger</i> Westwood [Ormyridae, HY]	do	Do.
<i>Sibinia attalica</i> (Gyllenhal) [Curculionidae, CO]	Reared from plant	Do.
<i>Centaurea calcitrapa</i> L.:		
<i>Acanthiophilus helianthi</i> (Rossi) [Tephritidae, DI]	Reared from head	Do.
<i>Cochylis posterana</i> (Zeller) [Cochylidae, LE]	do	Do.
<i>Danacea</i> sp. [Melyridae, CO]	Reared from plant	Do.
<i>Eurytoma tibialis</i> Boheman [Eurytomidae, HY]	Reared from head	Do.
<i>Heliothis peltiger</i> (Denis & Schiffermüller) [Noctuidae, LE]	Reared from foliage	Turkey.
<i>Hephathus nanus</i> (Herrich-Schäffer) [Cicadellidae, H-HO]	Feeding on plant	Italy.
<i>Hysteropterum grylloides</i> (Fabricius) [Issidae, H-HO]	Resting on foliage	Turkey.
<i>Larinus longirostris</i> Gyllenhal [Curculionidae, CO]	Reared from head	Italy.
<i>Ormyrus graciosus</i> (Foerster) [Ormyridae, HY]	do	Do.
<i>Phytomyza</i> prob. <i>horticola</i> Goureau [Agromyzidae, DI]	Reared from leaf	Do.
<i>Porphyria parva</i> (Hübner) [Noctuidae, LE]	Reared from head	Yugoslavia.
<i>Porphyria parva</i> (Hübner) [Noctuidae, LE]	Reared from plant	Do.
<i>Pyroderces argyrogrammos</i> (Zeller) [Cosmopterigidae, LE]	Reared from head	Italy.
<i>Urophora</i> prob. <i>quadrfasciata</i> (Meigen) [Tephritidae, DI]	Swept from plant	Egypt.
<i>Centaurea cineraria</i> L.:		
<i>Drepressaria</i> sp. [Oecophoridae, LE]	Reared from plant	Italy.
<i>Isocolus scabiosae</i> (Giraud) [Cynipidae, HY]	Reared from head	Do.
<i>Parmena</i> sp. [Cerambycidae, CO]	Reared from stem	Do.
<i>Ptinus villiger</i> (Reitter) [Ptinidae, CO]	Reared from plant	Do.
<i>Centaurea diffusa</i> Lamarck:		
<i>Lasioderma serricorne</i> (Fabricius) [Anobiidae, CO]	Reared from head	Germany.
<i>Urophora</i> prob. <i>quadrfasciata</i> (Meigen) [Tephritidae, DI]	do	Do.
<i>Centaurea jacea</i> L.:		
<i>Acanthiophilus helianthi</i> (Rossi) [Tephritidae, DI]	do	Austria.
<i>Acanthiophilus helianthi</i> (Rossi) [Tephritidae, DI]	do	France.
<i>Acanthiophilus helianthi</i> (Rossi) [Tephritidae, DI]	do	Germany.
<i>Anthomyza gracilis</i> Fallén [Anthomyzidae, DI]	Reared from plant	Do.
<i>Bangasternus</i> sp. [Curculionidae, CO]	Reared from head	Italy.
<i>Chaetorellia</i> sp. [Tephritidae, DI]	Reared	Do.
<i>Chaetostomella onotrophes</i> (Loew) [Tephritidae, DI]	Reared from head	Germany.
<i>Eudecatoma biguttata</i> Swederus or <i>E. submutica</i> (Thomson)		
[Eurytomidae, HY]	do	Italy.
<i>Eudecatoma submutica</i> (Thomson) [Eurytomidae, HY]	do	Do.
<i>Eurytoma robusta</i> Mayr [Eurytomidae, HY]	do	Do.
<i>Eurytoma tibialis</i> Boheman [Eurytomidae, HY]	do	Do.
<i>Larinus planus</i> (Fabricius) [Curculionidae, CO]	do	Do.
<i>Larinus sturnus</i> (Schaller) [Curculionidae, CO]	do	Do.
<i>Lasioderma serricorne</i> (Fabricius) [Anobiidae, CO]	do	Do.
<i>Orellia falcata</i> (Scopoli) [Tephritidae, DI]	do	Do.
<i>Ormyrus punctiger</i> Westwood [Ormyridae, HY]	Reared from head	Do.
<i>Oscinella frit</i> (L.) [Chloropidae, DI]	Reared from plant	Germany.
<i>Polyodaspis ruficornis</i> (Macquart) [Chloropidae, DI]	Reared from head	Do.
<i>Polyodaspis ruficornis</i> (Macquart) [Chloropidae, DI]	Reared from plant	Do.
<i>Rhinocyllus conicus</i> (Froelich) [Curculionidae, CO]		Italy.
<i>Sarcophaga</i> sp. [Sarcophagidae, DI]	Reared from plant	Do.
<i>Sitona</i> sp. [Curculionidae, CO]	Reared from head	Germany.
<i>Urophora quadrfasciata</i> (Meigen) [Tephritidae, DI]	do	Do.
<i>Urophora</i> prob. <i>quadrfasciata</i> (Meigen) [Tephritidae, DI]	do	Do.

See footnotes at end of table.

Table 2.—Selected weedy plants and associated insects, extent of their association, and country of origin—Continued

<i>Plant and insect</i> ¹	<i>Insect-plant relationship</i> ²	<i>Country</i>
<i>Centaurea maculosa</i> Lamarck:		
<i>Acanthiophilus helianthi</i> (Rossi) [Tephritidae, DI] -----	do -----	Do.
<i>Apion onopordi</i> Kirby [Curculionidae, CO] -----	Reared from root -----	Austria.
<i>Bracon</i> sp. [Braconidae, HY] -----	-----	France.
<i>Corticaria</i> sp. [Lathridiidae, CO] -----	Reared from plant -----	Germany.
<i>Eurytoma tibialis</i> Boheman [Eurytomidae, HY] -----	Reared from head -----	France.
<i>Meligethes incanus</i> Sturm [Nitidulidae, CO] -----	Reared from plant -----	Italy.
<i>Ormyrus punctiger</i> Westwood [Ormyridae, HY] -----	-----	France.
<i>Otiorhynchus ovatus</i> (L.) [Curculionidae, CO] -----	Reared from plant -----	Germany.
<i>Terellia virens</i> (Loew) [Tephritidae, DI] -----	-----	France.
<i>Urophora affinis</i> (Frauenfeld) [Tephritidae, DI] -----	Reared from head -----	Austria.
<i>Urophora affinis</i> (Frauenfeld) [Tephritidae, DI] -----	do -----	France.
<i>Urophora quadrifasciata</i> (Meigen) [Tephritidae, DI] -----	do -----	Germany.
<i>Urophora</i> prob. <i>quadrifasciata</i> (Meigen) [Tephritidae, DI] -----	do -----	France.
<i>Urophora</i> prob. <i>quadrifasciata</i> (Meigen) [Tephritidae, DI] -----	do -----	Germany.
<i>Centaurea napifolia</i> L.:		
<i>Acalles dromedarius</i> Boheman [Curculionidae, CO] -----	Reared from root -----	Italy.
<i>Acalles</i> sp. [Curculionidae, CO] -----	do -----	Do.
<i>Acanthiophilus helianthi</i> (Rossi) [Tephritidae, DI] -----	Reared from head -----	Do.
<i>Attalus</i> sp. [Melyridae, CO] -----	Reared from plant -----	Do.
<i>Cnephasia</i> sp. [Tortricidae, LE] -----	Reared from stem -----	Do.
<i>Eudecatoma biguttata</i> Swederus or <i>E. submutica</i> (Thomson)		
[Eurytomidae, HY] -----	Reared from head -----	Do.
<i>Eudecatoma submutica</i> (Thomson) [Eurytomidae, HY] -----	do -----	Do.
<i>Hypera postica</i> (Gyllenhal) [Curculionidae, CO] -----	Reared from plant -----	Do.
<i>Isocolus scabiosae</i> (Giraud) [Cynipidae, HY] -----	Reared from head -----	Do.
<i>Larinus longirostris</i> Gyllenhal [Curculionidae, CO] -----	do -----	Do.
<i>Lasioderma serricorne</i> (Fabricius) [Anobiidae, CO] -----	do -----	Do.
<i>Rhyzobius litura</i> (Fabricius) [Coccinellidae, CO] -----	Feeding on leaf -----	Do.
<i>Centaurea napifolia</i> L.?:		
<i>Porphyrinia parva</i> (Hübner) [Noctuidae, LE] -----	Reared from plant -----	Do.
<i>Centaurea nicaeensis</i> Allioni:		
<i>Acalles</i> sp. [Curculionidae, CO] -----	Reared from head -----	Do.
<i>Acanthiophilus helianthi</i> (Rossi) [Tephritidae, DI] -----	do -----	Do.
<i>Apion</i> sp. [Curculionidae, CO] -----	Resting on plant -----	Do.
<i>Coleophora</i> sp. [Coleophoridae, LE] -----	Reared from head -----	Do.
<i>Eudecatoma biguttata</i> Swederus or <i>E. submutica</i> (Thomson)		
[Eurytomidae, HY] -----	do -----	Do.
<i>Eudecatoma submutica</i> (Thomson) [Eurytomidae, HY] -----	do -----	Do.
<i>Eurytoma robusta</i> Mayr [Eurytomidae, HY] -----	do -----	Do.
<i>Eurytoma tibialis</i> Boheman [Eurytomidae, HY] -----	do -----	Do.
<i>Gymnetron</i> sp. [Curculionidae, CO] -----	Reared from plant -----	Do.
<i>Larinus flavescens</i> Germar [Curculionidae, CO] -----	Reared -----	Do.
<i>Larinus longirostris</i> Gyllenhal [Curculionidae, CO] -----	Resting on plant -----	Do.
<i>Larinus longirostris</i> Gyllenhal [Curculionidae, CO] -----	Reared from head -----	Do.
<i>Lasioderma serricorne</i> (Fabricius) [Anobiidae, CO] -----	do -----	Do.
<i>Leucopis</i> sp. [Chamaemyiidae, DI] -----	Reared from plant -----	Do.
<i>Lonchoptera furcata</i> (Fallén) [Lonchopteridae, DI] -----	do -----	Do.
<i>Mordellistena</i> sp. [Mordellidae, CO] -----	do -----	Do.
<i>Orellia</i> near <i>punctata</i> (Schrank) [Tephritidae, DI] -----	Reared from head -----	Do.
<i>Ormyrus punctiger</i> Westwood [Ormyridae, HY] -----	do -----	Do.
<i>Urophora</i> prob. <i>quadrifasciata</i> (Meigen) [Tephritidae, DI] -----	do -----	Do.

See footnotes at end of table.

Table 2.—Selected weedy plants and associated insects, extent of their association, and country of origin—Continued

<i>Plant and insect</i> ¹	<i>Insect-plant relationship</i> ²	<i>Country</i>
<i>Centaurea nigra</i> L.:		
<i>Chaetostomella onotrophes</i> (Loew) [Tephritidae, DI] -----	do -----	Germany.
<i>Urophora jaceana</i> (Hering) [Tephritidae, DI] -----	do -----	France.
<i>Centaurea paniculata</i> L.:		
<i>Acanthiophilus helianthi</i> (Rossi) [Tephritidae, DI] -----	do -----	Do.
<i>Centaurea phrygia</i> L.:		
<i>Chaetostomella onotrophes</i> (Loew) [Tephritidae, DI] -----	do -----	Germany.
<i>Eurytoma robusta</i> Mayr [Eurytomidae, HY] -----	do -----	Do.
<i>Eurytoma tibialis</i> Boheman [Eurytomidae, HY] -----	do -----	Italy.
<i>Isocolus scabiosae</i> (Giraud) [Cynipidae, HY] -----	do -----	Germany.
<i>Larinus australis</i> Capiomont [Curculionidae, CO] -----	do -----	Austria.
<i>Centaurea repens</i> L.:		
<i>Acanthiophilus helianthi</i> (Rossi) [Tephritidae, DI] -----	Swept from plant -----	Iran.
<i>Attalus</i> sp. [Melyridae, CO] -----	do -----	Do.
<i>Bruchidius quinqueguttatus</i> (Olivier) complex [Bruchidae, CO] -----	do -----	Do.
<i>Circulifer opacipennis</i> (Lethierry) [Cicadellidae, H-HO] -----	do -----	Do.
<i>Clytra atraphaxidis</i> Pallas or near [Chrysomelidae, CO] -----	do -----	Do.
Probably <i>Coptocephala</i> sp. [Chrysomelidae, CO] -----	do -----	Do.
<i>Deltocephalus</i> sp. [Cicadellidae, H-HO] -----	do -----	Do.
<i>Eumerus strigatus</i> Fallén [Syrphidae, DI] -----	do -----	Do.
<i>Handianus</i> sp. [Cicadellidae, H-HO] -----	do -----	Do.
<i>Holcostethus</i> sp. [Pentatomidae, H-HE] -----	do -----	Do.
<i>Hyalesthes obsoletus</i> Signoret [Cixiidae, H-HO] -----	do -----	Do.
<i>Oliarus barajus</i> Dlabola [Cixiidae, H-HO] -----	do -----	Do.
<i>Spermophagus sericeus</i> (Geoffroy) [Bruchidae, CO] -----	do -----	Do.
<i>Tettigometra griseola</i> Fieber [Tettigometridae, H-HO] -----	do -----	Do.
<i>Tettigometra</i> sp. [Tettigometridae, H-HO] -----	do -----	Do.
<i>Thaumatomyia sulcifrons</i> (Becker) [Chloropidae, DI] -----	do -----	Do.
<i>Timia xanthaspis</i> (Loew) [Otitidae, DI] -----	do -----	Do.
<i>Centaurea scabiosa</i> L.:		
<i>Chaetostomella onotrophes</i> (Loew) [Tephritidae, DI] -----	Reared from head -----	Germany.
<i>Eurytoma robusta</i> Mayr [Eurytomidae, HY] -----	do -----	Do.
<i>Eurytoma tibialis</i> Boheman [Eurytomidae, HY] -----	do -----	Do.
<i>Isocolus scabiosae</i> (Giraud) [Cynipidae, HY] -----	do -----	Do.
<i>Larinus</i> near <i>leuzeae</i> Fabre [Curculionidae, CO] -----	do -----	Do.
<i>Orellia colon</i> (Meigen) [Tephritidae, DI] -----	do -----	Do.
<i>Orellia</i> sp. [Tephritidae, DI] -----	do -----	Do.
<i>Urophora cuspidata</i> (Meigen) [Tephritidae, DI] -----	do -----	Do.
<i>Urophora</i> prob. <i>quadrifasciata</i> (Meigen) [Tephritidae, DI] -----	do -----	Do.
<i>Centaurea sphaerocephala</i> L.:		
<i>Orellia punctata</i> (Schrank) [Tephritidae, DI] -----	do -----	Italy.
<i>Psilothrix</i> sp. [Melyridae, CO] -----	Resting on flower -----	Do.
<i>Pyroderces argyrogrammos</i> (Zeller) [Cosmopterigidae, LE] -----	Reared from head -----	Do.
<i>Centaurea</i> sp.:		
<i>Acalles</i> sp. [Curculionidae, CO] -----	Reared from plant -----	Do.
<i>Caenacis</i> sp. [Pteromalidae, HY] -----	Reared from head -----	Do.
<i>Chaetostomella onotrophes</i> (Loew) [Tephritidae, DI] -----	do -----	Do.
<i>Eurytoma robusta</i> Mayr [Eurytomidae, HY] -----	do -----	Do.
<i>Larinus</i> prob. <i>australis</i> Capiomont [Curculionidae, CO] -----	do -----	Do.
<i>Rhinocyllus conicus</i> (Froelich) [Curculionidae, CO] -----	do -----	Do.
<i>Terellia serratulae</i> (L.) [Tephritidae, DI] -----	do -----	Do.

See footnotes at end of table.

Table 2.—Selected weedy plants and associated insects, extent of their association, and country of origin—Continued

<i>Plant and insect</i> ¹	<i>Insect-plant relationship</i> ²	<i>Country</i>
<i>Cirsium arvense</i> (L.) Scopoli:		
<i>Altica carduorum</i> (Guérin-Ménéville) [Chrysomelidae, CO]	-----	France.
<i>Apion detritum</i> Rey [Curculionidae, CO]	----- Reared from stem -----	Italy.
<i>Bruchidius</i> sp. [Bruchidae, CO]	----- Reared from head -----	Germany.
<i>Cassida</i> prob. <i>vibex</i> L. [Chrysomelidae, CO]	----- Reared from foliage -----	Yugoslavia.
<i>Ceutorhynchus litura</i> (Fabricius) [Curculionidae, CO]	----- Resting on plant -----	Switzerland.
<i>Chaetostomella onotrophes</i> (Loew) [Tephritidae, DI]	----- Reared from plant -----	Germany.
<i>Cleonus piger</i> (Scopoli) [Curculionidae, CO]	----- Reared from root -----	Italy.
<i>Cochylis</i> near <i>hybridella</i> (Hübner) [Cochylidae, LE]	----- Reared from head -----	Yugoslavia.
<i>Corticaria</i> sp. [Lathridiidae, CO]	----- do -----	Germany.
<i>Epuraea</i> sp. [Nitidulidae, CO]	----- Reared from plant -----	Do.
<i>Eurytoma robusta</i> Mayr [Eurytomidae, HY]	----- Reared from head -----	Do.
<i>Eurytoma tibialis</i> Boheman [Eurytomidae, HY]	----- do -----	Do.
<i>Eurytoma tibialis</i> Boheman [Eurytomidae, HY]	----- do -----	Yugoslavia.
<i>Larinus planus</i> (Fabricius) [Curculionidae, CO]	----- Feeding on plant -----	Germany.
<i>Larinus planus</i> (Fabricius) [Curculionidae, CO]	----- Reared from head -----	Do.
<i>Larinus planus</i> (Fabricius) [Curculionidae, CO]	-----	Switzerland.
<i>Larinus planus</i> (Fabricius) [Curculionidae, CO]	----- Resting on plant -----	Spain.
<i>Larinus turbinatus</i> Gyllenhal [Curculionidae, CO]	----- Reared from head -----	Italy.
<i>Larinus turbinatus</i> Gyllenhal [Curculionidae, CO]	----- do -----	Germany.
<i>Larinus turbinatus</i> Gyllenhal [Curculionidae, CO]	----- do -----	Yugoslavia.
<i>Larinus turbinatus</i> Gyllenhal [Curculionidae, CO]	----- Resting on plant -----	Germany.
<i>Larinus turbinatus</i> Gyllenhal [Curculionidae, CO]	-----	France.
<i>Lema cyanella</i> L. [Chrysomelidae, CO]	-----	England.
<i>Meligethes</i> sp. [Nitidulidae, CO]	----- Reared from plant -----	Italy.
<i>Ormyrus punctiger</i> Westwood [Ormyridae, HY]	----- Reared from head -----	Yugoslavia.
<i>Otiorhynchus</i> sp. [Curculionidae, CO]	----- Reared from plant -----	Germany.
<i>Philaenus spumarius</i> (L.) [Cercopidae, H-HO]	----- On plant -----	Italy.
<i>Phora</i> sp. [Phoridae, DI]	----- Reared from plant -----	Germany.
<i>Pyroderces argyrogrammos</i> (Zeller) [Cosmopterigidae, LE]	----- do -----	Italy.
<i>Sitona</i> sp. [Curculionidae, CO]	----- Reared from head -----	Germany.
<i>Sphaeroderma rubidum</i> (Graells) [Chrysomelidae, CO]	-----	Switzerland.
<i>Sphaeroderma testaceum</i> L. [Chrysomelidae, CO]	-----	Do.
<i>Stictopleurus punctatonevrosus</i> (Goeze) [Rhopalidae, H-HE]	----- Resting on head -----	Germany.
<i>Tychius quinquepunctatus</i> (L.) [Curculionidae, CO]	----- Swept from plant -----	Italy.
<i>Urophora stylata</i> (Fabricius) [Tephritidae, DI]	----- Reared from head -----	Yugoslavia..
<i>Cirsium odontolepis</i> Boissier:		
<i>Porphyria purpurina</i> (Denis & Schiffermüller) [Noctuidae, LE]	----- Reared from plant -----	Italy.
<i>Cirsium vulgare</i> (Savi) Tenore:		
<i>Adscita</i> sp. [Zygaenidae, LE]	----- do -----	Do.
<i>Altica carduorum</i> (Guérin-Ménéville) [Chrysomelidae, CO]	----- Feeding on leaf -----	Do.
<i>Apion</i> sp. [Curculionidae, CO]	----- Reared from crown -----	Do.
<i>Cleonus morbillosus</i> (Fabricius) [Curculionidae, CO]	----- Reared from head -----	France.
<i>Cleonus piger</i> (Scopoli) [Curculionidae, CO]	----- Reared from root -----	Germany.
<i>Cleonus piger</i> (Scopoli) [Curculionidae, CO]	----- On plant -----	Italy.
<i>Epiblema</i> near <i>pflugiana</i> (Fabricius) [Tortricidae, LE]	----- Reared from stem -----	Do.
<i>Eupithecia</i> sp. [Geometridae, LE]	----- Reared from head -----	France.
<i>Eurytoma robusta</i> Mayr [Eurytomidae, HY]	----- do -----	Italy.
<i>Eurytoma tibialis</i> Boheman [Eurytomidae, HY]	----- do -----	France.
<i>Homeosoma</i> near <i>nebulella</i> (Denis & Schiffermüller) [Pyralidae, LE]	----- do -----	Italy.
<i>Larinus planus</i> (Fabricius) [Curculionidae, CO]	----- do -----	Germany.
<i>Larinus sturnus</i> (Schaller) [Curculionidae, CO]	----- do -----	France.
<i>Larinus sturnus</i> (Schaller) [Curculionidae, CO]	----- do -----	Italy.

See footnotes at end of table.

Table 2.—Selected weedy plants and associated insects, extent of their association, and country of origin—Continued

<i>Plant and insect</i> ¹	<i>Insect-plant relationship</i> ²	<i>Country</i>
Cirsium vulgare (Savi) Tenore:—Continued		
<i>Larinus turbinatus</i> Gyllenhal [Curculionidae, CO] -----	do -----	Do.
<i>Lixus algerus</i> (L.) [Curculionidae, CO] -----	Reared from stem -----	Do.
<i>Lixus elongatus</i> (Goeze) [Curculionidae, CO] -----	do -----	Do.
<i>Phyllobius</i> sp. [Curculionidae, CO] -----	Resting on leaf -----	Do.
<i>Sitona gressorius</i> (Fabricius) [Curculionidae, CO] -----	Resting on plant -----	Do.
<i>Sitona</i> sp. [Curculionidae, CO] -----	Reared from plant -----	Germany.
<i>Sitona</i> sp. [Curculionidae, CO] -----	do -----	Italy.
<i>Terellia longicauda</i> (Meigen) [Tephritidae, DI] -----	Reared from head -----	France.
<i>Urophora stylata</i> (Fabricius) [Tephritidae, DI] -----	do -----	Germany.
<i>Urophora stylata</i> (Fabricius) [Tephritidae, DI] -----	do -----	Italy.
Cirsium sp.:		
<i>Agapanthia dahli</i> (Richter) [Cerambycidae, CO] -----		Austria.
<i>Lasioderma baudii</i> (Schilsky) [Anobiidae, CO] -----	Reared from head -----	Italy.
<i>Urophora stylata</i> (Fabricius) [Tephritidae, DI] -----	Resting on head -----	Do.
Cynara cardunculus L.:		
<i>Voria ruralis</i> (Fallén) [Tachinidae, DI] -----	Reared from noctuid larva ----	Do.
Cynara scolymus L.:		
<i>Acalles diocletianus</i> (Germar) [Curculionidae, CO] -----	Reared from head -----	Do.
<i>Acalles dromedarius</i> Boheman [Curculionidae, CO] -----	Reared from plant -----	Do.
<i>Acanthophilus helianthi</i> (Rossi) [Tephritidae, DI] -----	Reared from head -----	Do.
<i>Biosteres carbonaris</i> (Nees) [Braconidae, HY] -----	Parasitic on anthomyiid -----	Do.
<i>Bracon</i> sp. [Braconidae, HY] -----	Reared from unknown insect --	Do.
<i>Cacoecimorpha pronubana</i> (Hübner) [Tortricidae, LE] -----	Reared from head -----	Do.
<i>Drosophila funebris</i> (Fabricius) [Drosophilidae, DI] -----	do -----	Do.
<i>Gastroidea polygoni</i> (L.) [Chrysomelidae, CO] -----	Resting on leaf -----	Do.
<i>Homoeosoma</i> sp. [Pyralidae, LE] -----	Reared from head -----	Do.
<i>Larinus scolymi</i> (Olivier) [Curculionidae, CO] -----	Resting on plant -----	Do.
<i>Larinus scolymi</i> (Olivier) [Curculionidae, CO] -----	Reared from plant -----	Do.
<i>Lasioderma baudii</i> (Schilsky) [Anobiidae, CO] -----	On plant -----	Do.
<i>Melitaea cinxia</i> (L.) [Nymphalidae, LE] -----	Reared from foliage -----	Do.
<i>Prodotis stolidus</i> (Fabricius) [Noctuidae, LE] -----	Reared from plant -----	Do.
<i>Pyroderces argyrogrammos</i> (Zeller) [Cosmopterigidae, LE] -----	Reared from head -----	Do.
<i>Sitona</i> sp. [Curculionidae, CO] -----	do -----	Do.
<i>Sitona</i> sp. [Curculionidae, CO] -----	Resting on head -----	Do.
<i>Sitophilus</i> sp. [Curculionidae, CO] -----	Reared from head -----	Do.
<i>Sphaeroderma rubidum</i> (Graells) [Chrysomelidae, CO] -----	Feeding on foliage -----	Do.
<i>Subcoccinella vigintiquatuorpuntata</i> (L.) [Coccinellidae, CO] -----	On plant -----	Do.
<i>Terellia fuscicornis</i> (Loew) [Tephritidae, DI] -----	Reared from head -----	Do.
Cytisus scoparius (L.) Link:		
<i>Agrilus biguttatus</i> (Fabricius) [Buprestidae, CO] -----	Reared from stem -----	Do.
<i>Agrilus biguttatus</i> (Fabricius) [Buprestidae, CO] -----	Swept from plant -----	France.
<i>Anaspis</i> sp. [Mordellidae, CO] -----	From branch -----	Do.
<i>Apion fuscirostre</i> (Fabricius) [Curculionidae, CO] -----		?
<i>Bruchidius seminarius</i> (L.) [Bruchidae, CO] -----	Reared from seed -----	Italy.
<i>Chrysomela</i> or near [Chrysomelidae, CO] -----		France.
<i>Leucoptera spartifoliella</i> (Hübner) [Lyonetiidae, LE] -----		Do.
<i>Leucoptera spartifoliella</i> (Hübner) [Lyonetiidae, LE] -----		Italy.
<i>Phloeotribus rhododactylus</i> (Marshall) [Scolytidae, CO] -----	Reared from dead branch -----	France.
<i>Phytodecta olivacea</i> Forster [Chrysomelidae, CO] -----		Do.
Cytisus sp.:		
<i>Apion</i> near <i>compactum</i> Desbrochers [Curculionidae, CO] -----		?

See footnotes at end of table.

Table 2.—Selected weedy plants and associated insects, extent of their association, and country of origin—Continued

<i>Plant and insect</i> ¹	<i>Insect-plant relationship</i> ²	<i>Country</i>
Echinops sphaerocephalus L.:		
<i>Eurytoma robustus</i> Mayr or <i>E. tibialis</i> Boheman [Eurytomidae, HY]	Reared from head	Italy.
<i>Sitona</i> sp. [Curculionidae, CO]	Reared from plant	Do.
<i>Strophomorphus porcellus</i> (Schönherr) [Curculionidae, CO]	Reared from crown	Do.
Euphorbia esula L.:		
<i>Chamaesphesia empiformis</i> (Esper) [Sesiidae, LE]	Reared from roots	Austria.
Euphorbia sp.:		
<i>Hyles euphorbiae</i> (L.) [Sphingidae, LE]	Reared from foliage	Italy.
Galactites tomentosa Moench:		
<i>Agapanthia cardui</i> (L.) [Cerambycidae, CO]	Resting on plant	France.
<i>Agapanthia dahli</i> (Richter) [Cerambycidae, CO]	do	Italy.
<i>Ceutorhynchidius horridus</i> (Panzer) [Curculionidae, CO]	do	Do.
<i>Ceutorhynchidius horridus</i> (Panzer) [Curculionidae, CO]	Reared from crown	Do.
<i>Ceutorhynchus trimaculatus</i> (Fabricius) [Curculionidae, CO]	Feeding on leaf	Do.
<i>Ceutorhynchus trimaculatus</i> [Curculionidae, CO]	Reared from crown	Do.
<i>Pyroderes argyrogrammos</i> (Zeller) [Cosmopterigidae, LE]	Reared from head	Do.
Genista sagittalis L.:		
<i>Apion</i> near <i>formaneki</i> Wagner [Curculionidae, CO]		Germany.
Genista sp.:		
<i>Apion</i> sp. [Curculionidae, CO]		Do.
Hypericum sp.:		
<i>Chrysolina hyperici</i> Forster [Chrysomelidae, CO]	Feeding on foliage	Italy.
Linaria dalmatica (L.) Miller:		
<i>Brachypterolus pulicarius</i> (L.) [Nitidulidae, CO]	Resting on plant	Yugoslavia.
<i>Calophasia casta</i> (Borkhausen) [Noctuidae, LE]	Reared from leaves	Do.
<i>Chrysolina gypsophylae</i> Küster [Chrysomelidae, CO]		Do.
<i>Eurydema ornatum</i> L. [Pentatomidae, H-HE]	Resting on plant	Italy.
<i>Gymnetron</i> sp. [Curculionidae, CO]	Reared from seed	Do.
<i>Nezara viridula</i> [Pentatomidae, H-HE]		Do.
<i>Podabrus</i> sp. [Cantharidae, CO]	Resting on stem	Do.
<i>Stragmatophora serratella</i> (Treitschke) [Cosmopterigidae, LE]	Resting on plant	Do.
Linaria fastigiata Chavannes:		
<i>Brachypterolus pulicarius</i> (Linnaeus) [Nitidulidae, CO]	Resting on foliage	Iran.
<i>Gymnetron</i> sp. [Curculionidae, CO]	Resting on flower	Do.
<i>Phytoecia</i> sp. [Cerambycidae, CO]	Feeding on stem	Do.
Linaria genistifolia (L.) Miller:		
<i>Brachypterolus pulicarius</i> (L.) [Nitidulidae, CO]	Resting on plant	Greece.
<i>Brachypterolus pulicarius</i> (L.) [Nitidulidae, CO]	do	Turkey.
<i>Brachypterolus</i> sp. [Nitidulidae, CO]	do	Do.
<i>Bruchus dentipes</i> Baudi [Bruchidae, CO]	do	Do.
<i>Gymnetron</i> sp. [Curculionidae, CO]	do	Greece.
<i>Gymnetron</i> sp. [Curculionidae, CO]	do	Turkey.
<i>Leptocera</i> sp. [Sphaeroceridae, DI]	Reared from plant	Greece.
<i>Oscinella</i> sp. [Chloropidae, DI]	do	Do.
<i>Phytoecia</i> sp. [Cerambycidae, CO]	Feeding on stem	Turkey.
Linaria grandiflora Desfontaines:		
<i>Brachypterolus pulicarius</i> (L.) [Nitidulidae, CO]	Resting on plant	Do.
<i>Bruchus brachialis</i> Fabricius [Bruchidae, CO]	do	Do.
<i>Platypalpus</i> sp. [Empididae, DI]	Reared from plant	Do.

See footnotes at end of table.

Table 2.—Selected weedy plants and associated insects, extent of their association, and country of origin—Continued

<i>Plant and insect</i> ¹	<i>Insect-plant relationship</i> ²	<i>Country</i>
<i>Linaria heterophylla</i> Desfontaines:		
<i>Brachypterus pulicarius</i> (L.) [Nitidulidae, CO]	Resting on plant	Italy.
<i>Gymnetron netum</i> (Germar) [Curculionidae, CO]	Reared from seed pod	Do.
<i>Julistus</i> sp. [Melyridae, CO]	Resting on plant	Do.
<i>Linaria kurdica</i> Boissier & Hohenacker:		
<i>Brachypterus pulicarius</i> (L.) [Nitidulidae, CO]	do	Turkey.
<i>Brachypterus pulicarius</i> (L.) [Nitidulidae, CO]	Resting on bud	Do.
<i>Phytoecia</i> sp. [Cerambycidae, CO]	Resting on stem	Do.
<i>Linaria lineolata</i> Boissier:		
<i>Brachypterus pulicarius</i> (L.) [Nitidulidae, CO]	Resting on plant	Iran.
<i>Gymnetron</i> sp. [Curculionidae, CO]	do	Do.
<i>Linaria repens</i> (L.) Miller:		
<i>Gymnetron</i> sp. [Curculionidae, CO]	Reared from seed	France.
<i>Stagmatophora serratella</i> (Treitschke) [Cosmopterigidae, LE]	Resting on plant	Do.
<i>Stagmatophora serratella</i> (Treitschke) [Cosmopterigidae, LE]	Reared from root	Do.
<i>Linaria vulgaris</i> Miller:		
<i>Attalus</i> sp. [Melyridae, CO]	Reared from plant	Italy.
<i>Brachypterus pulicarius</i> (L.) [Nitidulidae, CO]	do	France.
<i>Brachypterus pulicarius</i> (L.) [Nitidulidae, CO]	Resting on flowers	Italy.
<i>Brachypterus pulicarius</i> (L.) [Nitidulidae, CO]	Resting on plant	Yugoslavia.
<i>Brachypterus</i> sp. [Nitidulidae, CO]	Reared from plant	Italy.
<i>Brachypterus</i> sp. [Nitidulidae, CO]	Resting on foliage	France.
<i>Bracon</i> sp. [Braconidae, HY]	Reared from plant material	Do.
<i>Bruchidius</i> prob. <i>unicolor</i> (Olivier) [Bruchidae, CO]	Reared from plant	Italy.
<i>Chelonus</i> sp. [Braconidae, HY]	Reared from <i>Stagmatophora serratella</i> larva in root.	Do.
<i>Chrysolina</i> sp. [Chrysomelidae, CO]	In soil near root	Do.
<i>Cymus glandicolor</i> Hahn [Lygaeidae, H-HE]	Resting on plant	Do.
<i>Dacnusa leptogaster</i> Haliday [Braconidae, HY]	Reared from plant material	France.
Probably <i>Danacaea</i> sp. [Melyridae, CO]	Reared from plant	Italy.
<i>Linaria vulgaris</i> Miller:		
Probably <i>Danacaea</i> sp. [Melyridae, CO]	Resting on plant	Do.
<i>Eupithecia linariata</i> (Denis & Schiffermüller) [Geometridae, LE]	Reared from flower	Do.
<i>Gymnetron antirrhini</i> (Paykull) [Curculionidae, CO]	Reared from seed	Do.
<i>Gymnetron antirrhini</i> (Paykull) [Curculionidae, CO]	Resting on flower	Do.
<i>Gymnetron linariae</i> (Panzer) [Curculionidae, CO]	Reared from pod	France.
<i>Gymnetron linariae</i> (Panzer) [Curculionidae, CO]	Reared from root	Do.
<i>Gymnetron netum</i> (Germar) [Curculionidae, CO]	Reared from seed pod	Italy.
<i>Gymnetron</i> sp. [Curculionidae, CO]	Reared from root gall	Do.
<i>Gymnoscelis pumilata</i> (Hübner) [Geometridae, LE]	Reared from plant	Do.
<i>Holcostethus strictus</i> (Fabricius) [Pentatomidae, H-HE]	Resting on plant	Do.
<i>Mecinus janthinus</i> (Germar) [Curculionidae, CO]	do	Do.
<i>Melitaea didyma</i> (Esper) [Nymphalidae, LE]	Reared from foliage	Do.
<i>Palpita unionalis</i> (Hübner) [Pyralidae, LE]	Reared from plant	Do.
<i>Stagmatophora serratella</i> (Treitschke) [Cosmopterigidae, LE]	Reared from root	Do.
<i>Linaria</i> sp.:		
<i>Adelphocoris lineolatus</i> (Goeze) [Miridae, H-HE]	On leaf	Turkey.
<i>Adelphocoris</i> sp. [Miridae, H-HE]	do	Do.
<i>Adonia variegata</i> (Goeze) [Coccinellidae, CO]	do	Do.
<i>Alloeonotus fulvipes</i> (Scopoli) [Miridae, H-HE]	Resting on plant	Yugoslavia.
<i>Anaphes</i> sp. [Mymaridae, HY]	Ex flower	Turkey.
<i>Anthicus</i> sp. [Anthicidae, CO]	On flower	Do.

See footnotes at end of table.

Table 2.—Selected weedy plants and associated insects, extent of their association, and country of origin—Continued

<i>Plant and insect</i> ¹	<i>Insect-plant relationship</i> ²	<i>Country</i>
<i>Linaria</i> sp.:—Continued		
<i>Anthocoris nemorum</i> (L.) [Anthocoridae, H-HE]	On leaf	Do.
<i>Apion</i> sp. [Curculionidae, CO]		
<i>Aplocnemus</i> sp. [Melyridae, CO]	Resting on plant	
<i>Brachycoleus decolor</i> Reuter [Miridae, H-HE]	On leaf	Do.
<i>Brachypterolus pulicarius</i> (L.) [Nitidulidae, CO]	do	Do.
<i>Brachypterolus pulicarius</i> (L.) [Nitidulidae, CO]	Feeding on flowers	Bulgaria.
<i>Brachypterolus pulicarius</i> (L.) [Nitidulidae, CO]	Reared from plant material	Italy.
<i>Bracon</i> near <i>osculator</i> Nees [Braconidae, HY]	On flower	Turkey.
<i>Calophasia casta</i> (Borkhausen) [Noctuidae, LE]	Pupa on plant	Italy.
<i>Camponotus lateralis</i> (Olivier) [Formicidae, HY]	On leaf	Turkey.
<i>Cardiophorus</i> near <i>niggerinus</i> Erichson [Elateridae, CO]	do	Do.
<i>Carpocoris lunulatus</i> (Goeze) [Pentatomidae, H-HE]	do	Do.
<i>Carpocoris mediterraneus</i> Taminini [Pentatomidae, H-HE]	do	Do.
<i>Carpocoris pudicus</i> (Poda) [Pentatomidae, H-HE]	do	Do.
<i>Cataglyphis</i> near <i>cursor</i> (Fonscolombe) [Formicidae, HY]	do	Do.
<i>Chrysolina variolosa</i> Pethena [Chrysomelidae, CO]	Reared from foliage	Italy.
<i>Chrysolina</i> sp. [Chrysomelidae, CO]		Turkey.
<i>Chrysolina</i> sp. [Chrysomelidae, CO]	Feeding on leaf	Bulgaria.
<i>Chrysopa</i> near <i>carnea</i> Stephens [Chrysopidae, NE]	On leaf	Turkey.
<i>Cicadatra</i> near <i>hyalina</i> (Fabricius) [Cicadidae, H-HO]	On stem	Do.
<i>Clytra laeviuscula</i> Ratzeburg or near [Chrysomelidae, CO]	On leaf	Do.
<i>Coccinella quinquepunctata</i> L. [Coccinellidae, CO]	On stem	Yugoslavia.
<i>Coccinella septempunctata</i> L. [Coccinellidae, CO]		Turkey.
<i>Colotes</i> sp. [Melyridae, CO]		Yugoslavia.
<i>Corizus hyoscyami</i> Linnaeus [Rhopalidae, H-HE]	On flower	Turkey.
Probably <i>Danacaea</i> sp. [Melyridae, CO]	On leaf	Do.
Probably <i>Danacaea</i> sp. [Melyridae, CO]	On stem	Yugoslavia.
<i>Dictyla echii</i> (Shrank) [Tingidae, H-HE]	On leaf	Turkey.
<i>Dolycoris baccarum</i> (L.) [Pentatomidae, H-HE]	do	Do.
<i>Enoplops discigera</i> (Kolenati) [Coreidae, H-HE]	do	Do.
<i>Entedon</i> sp. [Eulophidae, HY]		Do.
<i>Eupelmus</i> sp. [Eupelmidae, HY]	On flower	Yugoslavia.
<i>Eurygaster maura</i> (L.) [Pentatomidae, H-HE]	On leaf	Turkey.
<i>Eurytoma</i> sp. [Eurytomidae, HY]	Ex seed pod	Do.
<i>Eurytoma</i> sp. [Eurytomidae, HY]	On seed pod	Do.
<i>Eysarcoris inconspicuus</i> (Herrich-Schäffer) [Pentatomidae, H-HE]	Resting on plant	Italy.
<i>Formica</i> near <i>nasuta</i> Nylander [Formicidae, HY]	On stem	Turkey.
<i>Formica</i> sp. [Formicidae, HY]	do	Do.
<i>Heliothis</i> sp. [Noctuidae, LE]	On plant	Do.
<i>Leucopis</i> sp. [Chamaemyiidae, DI]	do	Do.
<i>Leucocelis</i> sp. [Scarabaeidae, CO]	On flower	Yugoslavia.
<i>Lygaeus equestris</i> (L.) [Lygaeidae, H-HE]	On leaf	Turkey.
<i>Lygus pratensis</i> (L.) [Miridae, H-HE]	do	Do.
<i>Lygus rugulipennis</i> Poppius [Miridae, H-HE]	do	Do.
<i>Mecinus</i> sp. [Curculionidae, CO]		
<i>Melitaea didyma</i> (Esper) [Nymphalidae, LE]	Reared from plant	Do.
<i>Microplitis</i> poss. <i>scrophulariae</i> Szelenyi [Braconidae, HY]	On flower	Do.
<i>Microplitis</i> poss. <i>variipes</i> Ruthe [Braconidae, HY]	do	Do.
<i>Mylabris apicipennis</i> Reiche [Meloidae, CO]	do	Do.
<i>Mylabris</i> sp. [Meloidae, CO]	On leaf	Do.
<i>Nemotelus</i> sp. #1 [Stratiomyidae, DI]	Reared from stem	Do.
<i>Nemotelus</i> sp. #2 [Stratiomyidae, DI]	do	Do.
<i>Nemotelus</i> sp. #2 [Stratiomyidae, DI]	On flower	Do.

See footnotes at end of table.

Table 2.—Selected weedy plants and associated insects, extent of their association, and country of origin—Continued

<i>Plant and insect</i> ¹	<i>Insect-plant relationship</i> ²	<i>Country</i>
<i>Linaria</i> sp.:—Continued		
<i>Omophalus</i> sp. [Alleculidae, CO] -----	Resting on plant -----	Italy.
<i>Paragus</i> sp. [Syrphidae, DI] -----	On flower -----	Turkey.
<i>Phyllotreta</i> sp. [Chrysomelidae, CO] -----	Resting on foliage -----	Do.
<i>Phytomyza</i> prob. <i>horticola</i> Goureau [Agromyzidae, DI] -----	Resting on leaf mine -----	Do.
<i>Plutella xylostella</i> (L.) [Plutellidae, LE] -----	Reared from pupa on leaf -----	Do.
<i>Podonta aubei</i> Mulsant [Alleculidae, CO] -----	-----	Do.
<i>Polymerus</i> sp. [Miridae, H-HE] -----	On leaf -----	Do.
<i>Rhinocoris iracundus</i> Poda [Reduviidae, H-HE] -----	do -----	Do.
<i>Rhopalus</i> sp. [Rhopalidae, H-HE] -----	do -----	Do.
<i>Scymnus</i> sp. [Coccinellidae, CO] -----	On flower -----	Yugoslavia.
<i>Scymnus</i> (s.str.) sp. [Coccinellidae, CO] -----	On leaf -----	Turkey.
<i>Spilostethus saxatilis</i> (Scopoli) [Lygaeidae, H-HE] -----	-----	Do.
<i>Spintherus</i> sp. [Pteromalidae, HY] -----	On seed pod -----	Do.
<i>Spintherus</i> sp. [Pteromalidae, HY] -----	On flower -----	Do.
<i>Stagmatophora serratella</i> (Treitschke) [Cosmopterigidae, LE] -----	Reared from root -----	Do.
<i>Subcoccinella vigintiquatuorpunctata</i> (L.) [Coccinellidae, CO] -----	On leaf -----	Do.
<i>Tapinoma</i> sp. [Formicidae, HY] -----	On stem -----	Do.
<i>Telenomus</i> sp. [Scelionidae, HY] -----	Ex flower -----	Do.
<i>Tettigonia caudata</i> (Charpentier) [Tettigoniidae, OR] -----	On leaf -----	Do.
<i>Onopordum acanthium</i> L.:		
<i>Lixus cardui</i> Olivier [Curculionidae, CO] -----	Reared from stem -----	Switzerland.
<i>Onopordum tauricum</i> Willdenow:		
<i>Apion onopordi</i> Kirby [Curculionidae, CO] -----	Reared from crown -----	Italy.
<i>Cercopis vulnerata</i> Rossi [Cercopidae, H-HO] -----	Resting on plant -----	Do.
<i>Cleonus piger</i> (Scopoli) [Curculionidae, CO] -----	Reared from root -----	Do.
<i>Crepidodera ferruginea</i> (Scopoli) or near [Chrysomelidae, CO] -----	Resting on plant -----	Do.
<i>Deraeocoris schach</i> (Fabricius) [Miridae, H-HE] -----	do -----	Do.
<i>Larinus australis</i> Capiomont [Curculionidae, CO] -----	do -----	Do.
<i>Larinus cynarae</i> (Fabricius) [Curculionidae, CO] -----	Resting on stem -----	Do.
<i>Myelois</i> sp. [Pyralidae, LE] -----	Reared from stem -----	Do.
<i>Orellia lappae</i> (Cederhjelms) [Tephritidae, DI] -----	Reared from head -----	Do.
<i>Philaenus spumarius</i> (L.) [Cercopidae, H-HO] -----	Resting on plant -----	Do.
<i>Sitona</i> sp. [Curculionidae, CO] -----	Reared from head -----	Do.
<i>Tephritis postica</i> (Loew) [Tephritidae, DI] -----	do -----	Do.
<i>Onopordum</i> sp.:		
<i>Acanthophilus helianthi</i> (Rossi) [Tephritidae, DI] -----	Reared from head -----	Do.
<i>Cochylis posterana</i> (Zeller) [Cochylidae, LE] -----	do -----	Do.
<i>Cryptocephalus hypochoeridis</i> (L.) [Chrysomelidae, CO] -----	Resting on leaves -----	Do.
<i>Dolycoris baccarum</i> (L.) [Pentatomidae, H-HE] -----	Resting on plant -----	Do.
<i>Eurytoma robusta</i> Mayr [Eurytomidae, HY] -----	Reared from head -----	Do.
<i>Glaphyrus</i> sp. [Scarabaeidae, CO] -----	Resting on leaves -----	Turkey.
<i>Graphosoma lineata</i> (L.) [Podopidae, H-HE] -----	Resting on plant -----	Italy.
<i>Larinus cynarae</i> (Fabricius) [Curculionidae, CO] -----	Resting on stem -----	Do.
<i>Larinus latus</i> (Herbst) [Curculionidae, CO] -----	Resting on plant -----	Turkey.
<i>Lixus cardui</i> Olivier [Curculionidae, CO] -----	Reared from stem -----	Italy.
<i>Mesocerus marginatus</i> (L.) ? [Coreidae, H-HE] -----	Resting on foliage -----	Do.
<i>Oedemera podagrariae</i> (L.) [Oedemeridae, CO] -----	Resting on leaves -----	Do.
<i>Orellia lappae</i> (Cederhjelms) [Tephritidae, DI] -----	Reared from stem -----	Do.
<i>Ormyrus punctiger</i> Westwood [Ormyridae, HY] -----	Reared from head -----	Do.
<i>Palomena prasina</i> (L.) [Pentatomidae, H-HE] -----	Resting on plant -----	Do.
<i>Pyroderces argyrogrammos</i> (Zeller) [Cosmopterigidae, LE] -----	Reared from head -----	Do.
<i>Tephritis postica</i> (Loew) [Tephritidae, DI] -----	do -----	Do.
<i>Terellia</i> near <i>virens</i> (Loew) [Tephritidae, DI] -----	do -----	Do.

See footnotes at end of table.

Table 2.—Selected weedy plants and associated insects, extent of their association, and country of origin—Continued

<i>Plant and insect</i> ¹	<i>Insect-plant relationship</i> ²	<i>Country</i>
<i>Quercus pubescens</i> Willdenow:		
<i>Bruchus brachialis</i> Fabricius [Bruchidae, CO] -----	Resting on bark -----	Do.
<i>Salsola kali</i> L.:		
<i>Coleophora</i> sp. [Coleophoridae, LE] -----	Ex plant -----	Egypt.
<i>Gymnancyla canella</i> (Denis & Schiffermüller) [Pryralidae, LE] -----	Reared from plant -----	Italy.
<i>Salsola</i> sp.:		
<i>Cryptocephalus populi</i> Suffrian or near [Chrysomelidae, CO] -----		Do.
<i>Geocoris megacephalus siculus</i> (Fieber) [Lygaeidae, H-HE] -----		Do.
<i>Salvai aethiopsis</i> L.:		
<i>Meligethes incanus</i> Sturm [Nitidulidae, CO] -----		Turkey.
<i>Phrydiuchus tau</i> Warner [Curculionidae, CO] -----		Yugoslavia.
<i>Salvia argentea</i> L.:		
<i>Phrydiuchus spilmani</i> Warner [Curculionidae, CO] -----	Resting on plant -----	Italy.
<i>Salvia limbata</i> C. A. von Meyer:		
<i>Heliothis peltiger</i> (Denis & Schiffermüller) [Noctuidae, LE] -----	Reared from foliage -----	Iran.
<i>Salvia palaestina</i> Bentham:		
<i>Cynthia cardui</i> (L.) [Nymphalidae, LE] -----	do -----	Turkey.
<i>Salvia verbenaca</i> L.:		
<i>Phytoecia pustulata</i> (Schrank) [Cerambycidae, CO] -----		Italy.
<i>Phytometra</i> sp. [Noctuidae, LE] -----	Reared from foliage -----	Do.
<i>Salvia virgata</i> Jacquin:		
<i>Sphragisticus nebulosus</i> (Fallén) [Lygaeidae, H-HE] -----		Do.
<i>Salvia</i> sp.:		
<i>Chrysolina grossa</i> (Fabricius) [Chrysomelidae, CO] -----		Do.
<i>Scrophularia canina</i> L.:		
<i>Ancyrosoma leucogrammum</i> (Gmelin) [Podopidae, H-HE] -----	Resting under plant -----	Do.
<i>Berytinus</i> sp. [Berytidae, H-HE] -----	do -----	Do.
<i>Heterogaster urticae</i> (Fabricius) [Lygaeidae, H-HE] -----	do -----	Do.
<i>Mesocerus marginatus</i> (L.) ? [Coreidae, H-HE] -----	do -----	Do.
<i>Phymata crassipes</i> (Fabricius) ? [Phymatidae, H-HE] -----	do -----	Do.
<i>Spermophagus sericeus</i> (Geoffroy) [Bruchidae, CO] -----	do -----	Do.
<i>Strobilotoma typhaecornis</i> (Fabricius) [Coreidae, H-HE] -----	do -----	Do.
<i>Senecio aquaticus</i> Hill:		
<i>Agapanthia</i> prob. <i>dahli</i> (Richter) [Cerambycidae, CO] -----	Reared from stem -----	Do.
<i>Alophus nictitans</i> Boheman [Curculionidae, CO] -----	Feeding on root -----	Do.
<i>Bracon</i> sp. [Braconidae, HY] -----	Prob. ex <i>Agapanthia</i> larva -----	Do.
<i>Chaetocnema</i> prob. <i>conducta</i> Motschulsky [Chrysomelidae, CO] -----	Swept from plant -----	Do.
<i>Chlorissa</i> sp. [Geometridae, LE] -----	Reared from plant -----	Do.
<i>Cochylis</i> prob. <i>atricapitana</i> (Stephens) [Cochylidae, LE] -----	Reared from crown -----	Do.
<i>Eupithecia centaurearia</i> (Denis & Schiffermüller) [Geometridae, LE] -----	Reared from plant -----	Do.
<i>Gastroidea polygoni</i> (L.) [Chrysomelidae, CO] -----	In soil near roots -----	Do.
<i>Liriomyza strigata</i> (Meigen) [Agromyzidae, DI] -----	Reared from leaf -----	Do.
<i>Lixus punctiventris</i> Boheman [Curculionidae, CO] -----	Reared from crown & roots -----	Do.
<i>Longitarsus dorsalis</i> (Fabricius) [Chrysomelidae, CO] -----	Feeding on leaf -----	Do.
<i>Longitarsus ganglbaueri</i> Heikertinger [Chrysomelidae, CO] -----	Feeding on foliage -----	Do.
<i>Longitarsus</i> prob. <i>ganglbaueri</i> Heikertinger [Chrysomelidae, CO] -----	Swept from plant -----	Do.
<i>Longitarsus jacobaea</i> Waterhouse [Chrysomelidae, CO] -----	Resting on foliage -----	Do.
<i>Longitarsus</i> prob. <i>jacobaea</i> Waterhouse [Chrysomelidae, CO] -----	Swept from plant -----	Do.
<i>Longitarsus</i> near <i>tabidus</i> (Fabricius) [Chrysomelidae, CO] -----	Reared from roots -----	Do.
<i>Melanagromyza dettmeri</i> Hering [Agromyzidae, DI] -----	Reared from stem -----	Do.
<i>Melanagromyza</i> near <i>tripolii</i> Spencer [Agromyzidae, DI] -----	do -----	Do.

See footnotes at end of table.

Table 2.—Selected weedy plants and associated insects, extent of their association, and country of origin—Continued

<i>Plant and insect</i> ¹	<i>Insect-plant relationship</i> ²	<i>Country</i>
Senecio aquaticus Hill:—Continued		
<i>Otiorynchus rugostriatus</i> (Goeze) [Curculionidae, CO]	Reared from roots	Do.
<i>Oulema melanopus</i> (L.) [Chrysomelidae, CO]	Resting on leaves	Do.
<i>Philaenus spumarius</i> (L.) [Cercopidae, H-HO]	Reared from stem	Do.
<i>Philaenus spumarius</i> (L.) [Cercopidae, H-HO]	Resting on foliage	Do.
<i>Philaenus spumarius</i> (L.) [Cercopidae, H-HO]	Reared from foliage	Do.
<i>Phycitodes carlinella</i> (Heinemann) [Pyralidae, LE]	Reared from plant	Do.
<i>Sitona puncticollis</i> Stephens [Curculionidae, CO]	do	Do.
Senecio ercifolius L.:		
<i>Cacoecimorpha pronubana</i> (Hübner) [Tortricidae, LE]	Reared from foliage	Do.
Senecio jacobaea L.:		
<i>Apanteles</i> sp. [Braconidae, HY]	Reared from plant	Switzerland.
<i>Bracon</i> sp. [Braconidae, HY]	Reared from plant material	France.
<i>Bufo lucilia silvarum</i> (Meigen) [Calliphoridae, DI]	Reared	Do.
<i>Cochylis</i> prob. <i>atricapitana</i> (Stephens) [Cochylidae, LE]	Reared from crown	Germany.
<i>Diglyphosema</i> sp. [Cynipidae, HY]	Reared from agromyzid	France.
<i>Ematurga atomaria</i> (L.) [Geometridae, LE]	Reared from head	Do.
<i>Eucosma campoliliana</i> (Denis & Schiffermüller) ? [Tortricidae, LE]	Reared from plant	Do.
<i>Eumerus</i> sp. [Syrphidae, DI]	Feeding in root	Do.
<i>Eupithecia absinthiata</i> (Clerck) [Geometridae, LE]		Do.
<i>Eupithecia centaurearia</i> (Denis & Schiffermüller) [Geometridae, LE]	Reared from plant	Do.
<i>Eutrias</i> sp. [Cynipidae, HY]	Reared from Diptera pupa	Do.
<i>Exartema</i> sp. [Tortricidae, LE]	Reared from plant	Do.
<i>Fannia</i> sp. [Muscidae, DI]	Swept from plant	Do.
<i>Hylemya brassicae</i> (Wiedemann) [Anthomyiidae, DI]	do	Do.
<i>Hylemya cinerella</i> (Fallén) [Anthomyiidae, DI]	do	Do.
<i>Hylemya coarctata</i> (Fallén) [Anthomyiidae, DI]	do	Do.
<i>Hylemya platura</i> (Meigen) [Anthomyiidae, DI]	Reared from plant	Do.
<i>Hylemya pullula</i> (Zetterstedt) [Anthomyiidae, DI]	Swept from plant	Do.
<i>Hylemya radicum</i> (L.) [Anthomyiidae, DI]	do	Do.
<i>Hylemya seneciella</i> (Meade) [Anthomyiidae, DI]	Reared from head	Do.
<i>Lasioderma baudii</i> (Schilsky) [Anobiidae, CO]	Reared from plant	Germany.
<i>Liriomyza latigenis</i> (Hendel) [Agromyzidae, DI]	do	France.
<i>Lixus punctiventris</i> Boheman [Curculionidae, CO]	Reared from crown & roots	Germany.
<i>Lixus punctiventris</i> Boheman [Curculionidae, CO]	do	Switzerland.
<i>Longitarsus</i> prob. <i>ganglbaueri</i> Heikertinger [Chrysomelidae, CO]	Swept from plant	Do.
<i>Longitarsus</i> prob. <i>jacobaea</i> Waterhouse [Chrysomelidae, CO]	do	Do.
<i>Longitarsus</i> prob. <i>jacobaea</i> Waterhouse [Chrysomelidae, CO]	Reared from root	Do.
<i>Longitarsus</i> sp. [Chrysomelidae, CO]	In soil under plant	France.
<i>Longitarsus</i> sp. [Chrysomelidae, CO]	Resting on plant	Do.
<i>Melanagromyza aeneoventris</i> (Fallén) [Agromyzidae, DI]	Reared from stem	Do.
<i>Melanagromyza eupatorii</i> Spencer [Agromyzidae, DI]	do	Switzerland.
<i>Olibrus corticalis</i> (Panzer) [Phalacridae, CO]		Italy.
<i>Ophiomyia senecionina</i> Hering [Agromyzidae, DI]	Reared from plant	France.
<i>Opius</i> sp. [Braconidae, HY]	do	Switzerland.
<i>Orgilus</i> sp. [Braconidae, HY]	Reared from crown & roots	Germany.
<i>Oulema melanopus</i> (L.) [Chrysomelidae, CO]	Reared from plant	Switzerland.
<i>Oxya nebulosa</i> (Wiedemann) [Tephritidae, DI]	Resting on head	Do.
<i>Pantomorus cervinus</i> (Boheman) [Curculionidae, CO]	Resting on stem	Italy.
<i>Paroxyna</i> prob. <i>tessellata</i> (Loew) [Tephritidae, DI]	Reared from plant	France.
Probably <i>Phycitodes albatella</i> (Ragonot) [Pyralidae, LE]	do	Switzerland.
<i>Psilus</i> sp. [Dipteridae, HY]	Reared from <i>Hylemya seneciella</i> (Meade).	France.
<i>Sermylassa halensis</i> (L.) [Chrysomelidae, CO]	Reared from plant	Do.

See footnotes at end of table.

Table 2.—Selected weedy plants and associated insects, extent of their association, and country of origin—Continued

<i>Plant and insect</i> ¹	<i>Insect-plant relationship</i> ²	<i>Country</i>
Senecio jacobaea L.:—Continued		
<i>Sitona lineatus</i> (L.) [Curculionidae, CO] -----	Resting on roots -----	Do.
<i>Sphaerophoria rueppelli</i> Wiedemann [Syrphidae, DI] -----		Italy.
<i>Sphenella marginata</i> (Fallén) [Tephritidae, DI] -----	Reared from head -----	France.
<i>Trupanea stellata</i> (Fuessly) [Tephritidae, DI] -----	do -----	Do.
<i>Trupanea stellata</i> (Fuessly) [Tephritidae, DI] -----	do -----	Germany.
<i>Trupanea stellata</i> (Fuessly) [Tephritidae, DI] ³ -----		Italy.
<i>Tyria jacobaeae</i> (L.) [Arctiidae, LE] -----		France.
Senecio nemorensis L.:		
<i>Cacoecimorpha pronubana</i> (Hübner) [Tortricidae, LE] -----	Reared from foliage -----	Do.
Senecio squalidus L.:		
<i>Peridroma saucia</i> (Hübner) [Noctuidae, LE] -----	Reared -----	Italy.
Silybum marianum (L.) Gaertner:		
<i>Apion detritum</i> Rey [Curculionidae, CO] -----	Reared from stem -----	Do.
<i>Carpocoris mediterraneus</i> Taminini [Pentatomidae, H-HE] -----	Resting on head -----	Do.
<i>Cassida near deflorata</i> Suffrian [Chrysomelidae, CO] -----	Feeding on foliage -----	Do.
<i>Cassida</i> prob. <i>vibex</i> L. [Chrysomelidae, CO] -----	do -----	Do.
<i>Cassida</i> prob. <i>vibex</i> L. [Chrysomelidae, CO] -----	Reared from foliage -----	Do.
<i>Cnephasia</i> sp. [Tortricidae, LE] -----	Reared from head -----	Do.
<i>Cynthia cardui</i> (Linnaeus) [Nymphalidae, LE] -----	Reared from foliage -----	Turkey.
<i>Gastroidea polygoni</i> (L.) [Chrysomelidae, CO] -----	Resting on leaf -----	Italy.
<i>Larinus cynarae</i> (Fabricius) [Curculionidae, CO] -----	Reared from head -----	Do.
<i>Larinus cynarae</i> (Fabricius) [Curculionidae, CO] -----	Feeding on head -----	Do.
<i>Lixus algeris</i> (L.) [Curculionidae, CO] -----	Resting on stem -----	Do.
<i>Pyroderces argyrogrammos</i> (Zeller) [Cosmopterigidae, LE] -----	Reared from head -----	Do.
<i>Rhinocyllus conicus</i> (Froelich) [Curculionidae, CO] -----	do -----	Do.
Tamarix sp.:		
<i>Apion</i> sp. [Curculionidae, CO] -----	Swept from plant -----	Turkey.
<i>Bruchidius</i> near <i>bimaculatus</i> (Olivier) [Bruchidae, CO] -----	do -----	Do.
<i>Bruchidius</i> near <i>imbricornis</i> (Panzer) [Bruchidae, CO] -----	do -----	Do.
<i>Bruchidius nudus</i> (Allard) [Bruchidae, CO] -----	do -----	Do.
<i>Cantharis</i> sp. [Cantharidae, CO] -----	do -----	Do.
<i>Ceratina</i> sp. [Anthophoridae, HY] -----	do -----	Do.
<i>Chlorophanus excisus</i> (Fabricius) [Curculionidae, CO] -----	do -----	Do.
<i>Coccinella septempunctata</i> L. [Coccinellidae, CO] -----	do -----	Do.
<i>Coniatius</i> sp. [Curculionidae, CO] -----	do -----	Do.
<i>Cteniopus</i> sp. [Alleculidae, CO] -----	do -----	Do.
<i>Desmometopa</i> near <i>m-nigrum</i> (Zetterstedt) [Milichiidae, DI] -----	do -----	Do.
<i>Diorhabda</i> sp. [Chrysomelidae, CO] -----	do -----	Do.
<i>Dolycoris baccarum</i> (L.) [Pentatomidae, H-HE] -----	do -----	Do.
<i>Hylemya</i> sp. [Anthomyiidae, DI] -----	do -----	Do.
<i>Malachius aeneus</i> L. [Melyridae, CO] -----	do -----	Do.
<i>Malachius</i> sp. #1 [Melyridae, CO] -----	do -----	Do.
<i>Malachius</i> sp. #2 [Melyridae, CO] -----	do -----	Do.
<i>Microphorus</i> sp. [Empididae, DI] -----	do -----	Do.
<i>Minettia plumicornis</i> (Fallén) [Lauxaniidae, DI] -----	do -----	Do.
<i>Nabis viridulus</i> Spinola [Nabidae, H-HE] -----	do -----	Do.
<i>Orthellia caesarion</i> (Meigen) [Muscidae, DI] -----	do -----	Do.
<i>Pachybrachys</i> sp. [Chrysomelidae, CO] -----	do -----	Do.
<i>Platypalpus</i> sp. [Empididae, DI] -----	do -----	Do.
<i>Trixoscelis frontalis</i> (Fallén) [Trixoscelidae, DI] -----	do -----	Do.
<i>Trixoscelis obscurella</i> (Fallén) [Trixoscelidae, DI] -----	do -----	Do.
<i>Valgus hemipterus</i> L. [Scarabaeidae, CO] -----	do -----	Do.

See footnotes at end of table.

Table 2.—Selected weedy plants and associated insects, extent of their association, and country of origin—Continued

<i>Plant and insect</i> ¹	<i>Insect-plant relationship</i> ²	<i>Country</i>
Tribulus terrestris L.:		
<i>Arthrolips</i> sp. [Orthoperidae, CO] -----	Reared from seed -----	Italy.
<i>Microlarinus lareynii</i> (Jacq. du Val) [Curculionidae, CO] -----	Reared from seed pod -----	Do.
<i>Microlarinus lypriformis</i> (Wollaston) [Curculionidae, CO] -----	Reared from stem -----	Do.
<i>Sarcophaga balanina</i> Pandellé [Sarcophagidae, DI] -----	In soil under plant -----	Do.

¹ CO = Coleoptera, DI = Diptera, H-HE = Hemiptera-Heteroptera, H-HO = Hemiptera-Homoptera, LE = Lepidoptera, HY = Hymenoptera, NE = Neuroptera, OR = Orthoptera.

² Dashes indicate no recorded insect-plant relationship.

³ Host species uncertain, probably *Senecio jacobaea* L.

INDEX OF INSECT AND PLANT NAMES

[Plant names are set in bold type]

A

Acalles diocletianus (Germar), 4, 20.
Acalles dromedarius Boheman, 4, 17, 20.
Acalles sp., 4, 17.
Acanthiophilus helianthi (Rossi), 8, 15, 16, 17, 18, 20, 24.
Adelphocoris lineolatus (Goeze), 9, 22.
Adelphocoris sp., 10, 22.
Adonia variegata (Goeze), 3, 22
Adscita sp., 14, 19.
Agapanthia cardui (L.), 2, 21.
Agapanthia dahli (Richter), 2, 20, 21.
Agapanthia probably *dahli* (Richter), 3, 25.
Agrilus biguttatus (Fabricius), 2, 20.
Agromyzidae, 7.
Alleculidae, 2.
Alloeonotus fulvipes (Scopoli), 10, 22.
Alophus nictitans Boheman, 4, 25.
Altica carduorum (Guérin-Ménéville), 3, 19.
Anaphes sp., 12, 22.
Anaspis sp. 6, 20.
Ancyrosoma leucogrammmum (Gmelin), 10, 25.
Anobiidae, 2.
Anthicidae, 2.
Anthicus sp., 2, 22.
Anthocoridae, 9.
Anthocoris nemorum (L.), 9, 23.
Anthomyiidae, 7.
Anthomyza gracilis Fallén, 7, 16.
Anthomyzidae, 7.
Anthophoridae, 11.
Apanteles sp., 11, 26.
Apion near *compactum* Desbrochers, 4, 20.
Apion detritum Rey, 4, 15, 19, 27.
Apion near *formanekei* Wagner, 4, 21.
Apion fuscirostre (Fabricius), 4, 20.
Apion onopordi Kirby, 4, 17, 24.
Apion sp., 4, 17, 19, 21, 23.
Aplocnemus sp., 6, 23.
Arctiidae, 12.

Arctium minus Bernhadi, 15.
Arthrolips sp., 7, 28.
Attalus sp., 6, 17, 18, 22.

B

Bangasternus sp., 4, 16.
Berytidae, 9.
Berytinus sp., 9, 25.
Biosteres carbonaris (Nees), 11, 20.
Boreava sp., 15.
Brachycoleus decolor Reuter, 10, 23.
Brachypterolus pulicarius (L.), 6, 21, 22, 23.
Brachypterolus sp., 6, 22.
Bracon near *osculator* Nees, 11, 23.
Bracon sp., 11, 17, 20, 25, 26.
Braconidae, 11.
Bruchidae, 2.
Bruchidius near *bimaculatus* (Olivier), 2, 27.
Bruchidius near *imbricornis* (Panzer), 2, 27.
Bruchidius nudus (Allard), 2, 27.
Bruchidius quinqueguttatus (Olivier) complex, 2, 18.
Bruchidius seminarius (L.), 2, 20.
Bruchidius sp. 2, 19.
Bruchidius probably *unicolor* (Olivier), 2, 22.
Bruchus brachialis Fabricius, 2, 25.
Bruchus dentipes Baudi, 2, 21.
Bufolucilia silvarum (Meigen), 7, 26.
Buprestidae, 2.

C

Cacoecimorpha pronubana (Hübner), 14, 20, 26, 27.
Caenacis sp., 12, 18.
Callipharidae, 7.
Calophasia casta (Borkhausen), 13, 21, 23.
Camponotus lateralis (Olivier), 12, 23.
Cantharidae, 2.
Cantharis sp., 2, 27.
Cardiophorus near *nigerrimus* Erichson, 6, 23.

Carlina corymbosa L., 15.
Carlina lanata L., 15.
Carlina vulgaris L., 15.
Carpocoris lunulatus (Goeze), 10, 23.
Carpocoris mediterraneus Taminini, 10, 23, 27.
Carpocoris pudicus (Poda), 10, 23.
Cartallum ebulinum (L.), 3, 15.
Carthamus lanatus L., 15.
Carthamus tinctorius L., 15.
Cassida near *deflorata* Suffrian, 3, 27.
Cassida probably *vibex* L., 3, 19, 27.
Cataglyphis near *cursor* (Fonscolombe), 12, 23.
Centaurea amara L., 15.
Centaurea caerulea Willdenow, 15, 16.
Centaurea calcitrapa L., 16.
Centaurea cineraria L., 16.
Centaurea diffusa Lamarck, 16.
Centaurea jacea L., 16.
Centaurea maculosa Lamarck, 17.
Centaurea napifolia L., 17.
Centaurea nicaeensis Allioni, 17.
Centaurea nigra L., 18.
Centaurea paniculata L., 18.
Centaurea phrygia L., 18.
Centaurea repens L., 18.
Centaurea scabiosa L., 18.
Centaurea sp., 18.
Centaurea sphaerocephala L., 18.
Cerambycidae, 2, 3.
Ceratina sp., 11, 27.
Cercopidae, 10.
Cercopis vulnerata Rossi, 10, 23.
Ceutorhynchidius horridus (Panzer), 4, 21.
Ceutorhynchus litura (Fabricius), 4, 19.
Ceutorhynchus trimaculatus (Fabricius), 4, 21.
Chaetocnema probably *conducta* Motschulsky, 3, 25.
Chaetorellia sp., 8, 15, 16.
Chaetostomella onotrophes (Loew), 8, 16, 18, 19.
Chamaemyiidae, 7.
Chamaesphacia empiformis (Esper), 14, 21.
Chelonus sp., 11, 22.
Chlorissa sp., 13, 25.
Chlorophanus excisus (Fabricius), 4, 27.
Chloropidae, 7.
Chrysolina grossa (Fabricius), 3, 25.
Chrysolina gypsophilae Küster, 3, 21.
Chrysolina hyperici Forster, 3, 21.
Chrysolina sp., 3, 22, 23.
Chrysolina variolosa Pethena, 2, 23.
Chrysomela sp. or near, 3, 20.
Chrysomelidae, 3.
Chrysopa near *carnea* Stephens, 14, 23.
Chrysopidae, 14.
Cicadatra near *hyalina* (Fabricius), 10, 23.
Cicadellidae, 10.
Cicadidae, 10.
Circulifer opacipennis (Lethierry), 10, 18.
Cirsium arvense (L.) Scopoli, 19.
Cirsium odontolepis Boissier, 19.
Cirsium sp., 20.
Cirsium vulgare (Savi) Tenore, 19, 20.
Cixiidae, 10.

Cleonus morbillosus (Fabricius), 4, 19.
Cleonus piger (Scopoli), 4, 15, 19, 24.
Clytra atraphaxidis Pallas or near, 3, 18.
Clytra laeviuscula Ratzeburg or near, 3, 23.
Cnephasia sp., 14, 17, 27.
Coccinella quinquepunctata L., 4, 23, 27.
Coccinella septempunctata L., 4, 23.
Coccinellidae, 3, 4.
Cochylidae, 12.
Cochylis probably *atricapitana* (Stephens), 12, 25, 26.
Cochylis near *hybridella* (Hübner), 12, 19.
Cochylis posterana (Zeller), 12, 16.
Coleophora sp., 13, 17, 25.
Coleophoridae, 12.
Colotes sp., 6, 23.
Coniatus sp., 4, 27.
Probably *Coptocephala* sp., 3, 18.
Coreidae, 9.
Corizus hyoscyami L., 10, 23.
Corticaria sp., 6, 17, 19.
Cosmopterigidae, 12, 13.
Crepidodera ferruginea (Scopoli) or near, 3, 24.
Cryptocephalus hypochoeridis (L.), 3, 24.
Cryptocephalus populi Suffrian or near, 3, 25.
Ctenopus sp. 2, 27.
Curculionidae, 4, 5, 6.
Cymus glandicolor Hahn, 9, 22.
Cynara cardunculus L., 20.
Cynara scolymus L., 20.
Cynipidae, 11.
Cynthia cardui (L.), 13, 25, 27.
Cytisus scoparius (L.) Link, 20.
Cytisus sp., 20.

D

Dacnusa leptogaster Haliday, 11, 22.
Danacaea sp., 6, 16.
Probably *Danacaea* sp., 6, 22, 23.
Deltocephalus sp., 10, 18.
Depressaria sp., 13, 16.
Deraeocoris schach (Fabricius), 10, 24.
Desmometopa near *m-nigrum* (Zetterstedt), 8, 27.
Diapriidae, 11.
Dictyla echii (Schränk), 10, 23.
Diglyphosema sp., 11, 26.
Diorhabda sp., 3, 27.
Divales bipustulata Fabricius, 6, 15.
Divales sp., 6, 15.
Dolycoris baccarum (L.), 10, 23, 24, 27.
Drosophila funebris (Fabricius), 7, 20.
Drosophilidae, 7.

E

Echinops sphaerocephalus L., 21.
Elateridae, 6.
Ematurga atomaria (L.), 13, 26.
Empididae, 7.
Enoplops discigera (Kolenati), 9, 23.
Entedon sp., 11, 23.
Epiblema near *pflugiana* (Fabricius), 14, 19.
Epuraea sp., 6, 19.

Eucosma campoliana (Denis & Schiffermüller), 14, 26.
Eudecatoma biguttata Swederus or *E. submutica* (Thomson), 11, 15, 16, 17.
Eudecatoma submutica (Thomson), 11, 15, 16, 17.
 Eulophidae, 11.
Eumerus sp., 8, 26.
Eumerus strigatus Fallén, 8, 18.
 Eupelmidae, 11.
Eupelmus sp., 11, 23.
Euphorbia esula L., 21.
Euphorbia sp., 21.
Eupithecia absinthiata (Clerck), 13, 26.
Eupithecia centaurearia (Denis & Schiffermüller), 13, 25.
Eupithecia linariata (Denis & Schiffermüller), 13, 22.
Eupithecia sp., 13, 19.
Eurydema ornatum L., 10, 21.
Eurygaster maura (L.), 10, 23.
Eurytoma robusta Mayr, 12, 15, 16, 17, 18, 19.
Eurytoma robusta Mayr or *E. tibialis* Boheman, 12, 21, 24.
Eurytoma sp., 12, 23.
Eurytoma tibialis Boheman, 12, 15, 16, 17, 18, 19.
 Eurytomidae, 11, 12.
Eutrias sp., 11, 26.
Exartema sp., 14, 26.
Eysarcoris inconspicuus (Herrich-Schäffer), 10, 23.

F

Fannia sp., 8, 26.
Formica near *nasuta* Nylander, 12, 23.
Formica sp., 12, 23.
 Formicidae, 12.

G

Galactites tomentosa Moench, 21.
Gastroidea polygona (L.), 3, 20, 25, 27.
Genista sagittalis L., 21.
Genista sp., 21.
Geocoris megacephalus sculus (Fieber), 9, 25.
 Geometridae, 13.
Glaphyrus sp., 7, 24.
Graphosoma lineata (L.), 10, 24.
Gymnancyla canella (Denis & Schiffermüller), 14, 25.
Gymnetron antirrhini (Paykull), 4, 22.
Gymnetron linariae (Panzer), 4, 22.
Gymnetron netum (Germar), 4, 22.
Gymnetron sp., 4, 17, 21, 22.
Gymnoscelis pumilata (Hübner), 13, 22.

H

Handianus sp., 10, 18.
Heliothis peltiger (Denis & Schiffermüller), 13, 16.
Heliothis sp., 13, 23.
Hephathus nanus (Herrich-Schäffer), 10, 13.
Heterogaster urticae (Fabricius), 9, 25.
Holcostethus sp., 10, 18.
Holcostethus strictus (Fabricius), 10, 22.
Homeosoma near *nebulella* (Denis & Schiffermüller), 13, 19.

Homeosoma sp., 13, 20.
Hyalesthes obsoletus Signoret, 11, 18.
Hylemya brassicae (Wiedemann), 7, 26.
Hylemya cinerella (Fallén), 7, 26.
Hylemya coarctata (Fallén), 7, 26.
Hylemya platura (Meigen), 7, 26.
Hylemya pullula (Zetterstedt), 7, 26.
Hylemya radicum (L.), 7, 15, 26.
Hylemya seneciella (Meade), 7, 26.
Hylemya sp., 7, 27.
Hyles euphorbiae (L.), 14, 21.
Hypera postica (Gyllenhal), 4, 17.
Hypericum sp., 21.
Hysteropterum grylloides (Fabricius), 11, 13.

I

Isocolus scabiosae (Giraud), 11, 15, 17, 18.
 Issidae, 10.

J

Julistus sp., 6, 27

L

Larinus australis Capiomont, 5, 18, 24.
Larinus probably *australis* Capiomont, 5, 18.
Larinus cynarae (Fabricius), 5, 24, 27.
Larinus flavescens Germar, 5, 15, 16, 17.
Larinus jaceae (Fabricius), 5, 15.
Larinus latus (Herbst), 5, 24.
Larinus near *leuzeae* Fabre, 5, 18.
Larinus longirostris Gyllenhal, 5, 16, 17.
Larinus planus (Fabricius), 5, 15, 16, 19.
Larinus rusticanus Gyllenhal, 5, 15.
Larinus scolymi (Olivier), 5, 20.
Larinus sturnus (Schaller), 5, 16, 19.
Larinus turbinatus Gyllenhal, 5, 20.
Larinus ursus (Fabricius), 5, 15.
Lasioderma baudii (Schilsky), 2, 20, 26.
Lasioderma probably *obscurum* Solsky, 2, 15.
Lasioderma serricorne (Fabricius), 2, 16, 17.
 Lathridiidae, 6.
 Lauxaniidae, 7.
Lema cyanella L., 3, 19.
Leptocera sp., 8, 21.
Leucocelis sp., 7, 23.
Leucopis sp., 7, 23.
Leucoptera spartifoliella (Hübner), 13, 20.
Linaria dalmatica (L.) Miller, 21.
Linaria fastigiata Chavannes, 21.
Linaria genistifolia (L.) Miller, 21.
Linaria grandiflora Desfontaines, 21.
Linaria heterophylla Desfontaines, 22.
Linaria kurdica Boissier & Hohenacker, 22.
Linaria lineolata Boissier, 22.
Linaria repens (L.) Miller, 22.
Linaria sp., 22, 23, 24.
Linaria vulgaris Miller, 22.

Liriomyza latigenis (Hendel), 7, 26.
Liriomyza strigata (Meigen), 7, 25.
Lixus algerus (L.), 5, 20, 27.
Lixus cardui Olivier, 5, 24.
Lixus elongatus (Goeze), 5, 20.
Lixus punctiventris Boheman, 5, 25, 26.
Lonchoptera furcata (Fallén), 8, 17.
 Lonchopteridae, 7.
Longitarsus dorsalis (Fabricius), 3, 25.
Longitarsus ganglbaueri Heikertinger, 3, 25.
Longitarsus probably *ganglbaueri* Heikertinger, 3, 25, 26.
Longitarsus jacobaea Waterhouse, 3, 25.
Longitarsus probably *jacobaea* Waterhouse, 3, 25, 26.
Longitarsus sp., 3, 26.
Longitarsus near *tabidus* (Fabricius), 3, 25.
 Lygaeidae, 9.
Lygaeus equestris (L.), 9, 23.
Lygus pratensis (L.), 10, 23.
Lygus rugulipennis Poppius, 10, 23.
 Lyonetiidae, 13.

M

Malachius aeneus L., 6, 27.
Malachius sp., 6, 27.
Mecinus janthinus (Germar), 5, 22.
Mecinus sp., 5, 22, 23.
Melanagromyza aeneoventris (Fallén), 7, 26.
Melanagromyza dettmeri Hering, 7, 25.
Melanagromyza eupatorii Spencer, 7, 26.
Melanagromyza near *tripolii* Spencer, 7, 25.
Meligethes incanus Sturm, 6, 17, 25.
Meligethes sp., 6, 19.
Melitaea cinxia (L.), 13, 20.
Melitaea didyma (Esper), 13, 22, 23.
 Meloidae, 6.
 Melyridae, 6.
Mesocerus marginatus (L.)?, 9, 24, 25.
Microlarinus lareynii (Jacq. du Val), 5, 28.
Microlarinus lypriformis (Wollaston), 5, 28.
Microphorus sp., 7, 27.
Microplitis possibly *scrophulariae* Szelenyi, 11, 23.
Microplitis possibly *variipes* Ruthe, 11, 23.
 Milichiidae, 8.
Minettia plumicornis (Fallén), 8, 27.
 Miridae, 9, 10.
 Mordellidae, 6.
Mordellistena sp., 6, 17.
 Muscidae, 8.
Myelois cribrella (Hübner), 13, 15.
Myelois sp., 13, 24.
Mylabris apicipennis Reiche, 6, 23.
Mylabris sp., 6, 23.
 Mymaridae, 12.

N

Nabidae, 10.
Nabis viridulus Spinola, 10, 27.
Nemotelus sp., 8, 23.
Nezara viridula (L.), 10, 21.

Nitidulidae, 6.
 Noctuidae, 13.
 Nymphalidae, 13.

O

Oecophoridae, 13.
Oedemera podagrariae (L.), 6, 24.
 Oedemeridae, 6.
Oliarus barajus Diabola, 11, 18.
Olibrus corticalis (Panzer), 7, 26.
Omophulus sp., 2, 24.
Onopordum acanthium L., 24.
Onopordum sp., 24.
Onopordum tauricum Willdenow, 24.
Ophiomyia senecionina Hering, 7, 26.
Opius sp., 11, 26.
Orellia colon (Meigen), 8, 15.
Orellia near *colon* (Meigen), 8, 18.
Orellia falcata (Scopoli), 8, 16.
Orellia lappae (Cederhjelm), 9, 24.
Orellia punctata (Schrank), 9, 17.
Orellia near *punctata* (Schrank), 9, 17.
Orellia sp., 9, 18.
Orgilus sp., 11, 26.
 Ormyridae, 12.
Ormyrus graciosus (Foerster), 12, 16.
Ormyrus punctiger Westwood, 12, 15, 16, 17, 19, 24.
Orthellia caesarion (Meigen), 8, 27.
 Orthoperidae, 6.
Oscinella frit (L.), 7, 16.
Oscinella sp., 7, 21.
Otiorynchus ovatus (L.), 5, 17.
Otiorynchus rugostriatus (Goeze), 5, 26.
Otiorynchus sp., 5, 19.
 Otitidae, 8.
Oulema melanopus (L.), 3, 26.
Oxya nebulosa (Wiedemann), 9, 26.

P

Pachybrachys sp., 3, 27.
Palomena prasina (L.), 10, 24.
Palpita unionalis (Hübner), 13, 22.
Pantomorus cervinus (Boheman), 5, 26.
Paragus sp., 8, 24.
Parmena sp., 3, 16.
Paroxyna probably *tessellata* (Loew), 9, 26.
 Pentatomidae, 10.
Peridroma saucia (Hübner), 13, 27.
 Phalacrididae, 6.
Phlaenus spumarius (L.), 10, 19, 24, 26.
Phloeotribus rhododactylus (Marsham), 7, 20.
Phora sp., 8, 19.
 Phoridae, 8.
Phrydiuchus spilmani Warner, 5, 25.
Phrydiuchus tau Warner, 5, 25.
 Probably *Phycitodes albatella* (Ragonot), 13, 26.
Phycitodes carlinella (Heinemann), 13, 26.
Phyllobius sp., 5, 20.
Phyllotreta sp., 3, 15.
Phymata crassipes (Fabricius)?, 10, 25.

Phymatidae, 10.
Phytodecta obliuacea Forster, 3, 20.
Phytoecia pustulata (Schränk), 3, 25.
Phytoecia sp., 3, 21, 22.
Phytometra sp., 13, 24, 25.
Phytomyza probably *horticola* Goureau, 7, 16, 24.
Platypalpus sp., 7, 21, 27.
Plutella xylostella (L.), 13, 24.
Plutellidae, 13.
Podabrus sp., 2, 21.
Podonta aubei Mulsant, 2, 24.
Podopidae, 10.
Polymerus sp., 10, 24.
Polydaspis ruficornis (Macquart), 7, 16.
Porphyria parva (Hübner), 13, 15, 16.
Porphyria purpurina (Denis & Schiffermüller), 13, 19.
Prodotis stolidus (Fabricius), 13, 15, 20.
Psilothrix sp., 6, 18.
Psilus sp., 11, 26.
Pteromalidae, 12.
Ptinidae, 7.
Ptinus villiger (Reitter), 7, 16.
Pyrallidae, 13.
Pyroderces argyrogrammos (Zeller), 13, 15, 16, 18, 19, 20, 21, 24, 27.

Q

Quercus pubescens Willdenow., 25.

R

Reduviidae, 10.
Rhinocoris iracundus Poda, 10, 24.
Rhinocyllus conicus (Froelich), 5, 16, 18, 27.
Rhopalidae, 10.
Rhopalus sp., 10, 24.
Rhyzobius litura (Fabricius), 4, 17.

S

Salsola kali L., 25.
Salsola sp., 25.
Salvia aethiopis L., 25.
Salvia argentea, L., 25.
Salvia limbata C.A. von Meyer, 25.
Salvia palaestina Benth., 25.
Salvia sp., 25.
Salvia verbenaca L., 25.
Salvia virgata Jacquin, 25.
Sarcophaga balanina Pandelle, 8, 28.
Sarcophaga sp., 8, 16.
Sarcophagidae, 8.
Scarabaeidae, 7.
Scelionidae, 12.
Scolytidae, 7.
Scrophularia canina L., 25.
Scymnus sp., 4, 15, 24.
Scymnus (s. str.) sp., 4, 24.

Senecio aquaticus Hill, 25, 26.
Senecio ercifolius L., 26.
Senecio jacobaea L., 26, 27.
Senecio nemorensis L., 27.
Senecio squalidus L., 27.
Sermylissa halensis (L.), 3, 27.
Sesiidae, 14.
Sibinia attalica (Gyllenhal), 5, 15, 16.
Silybum marianum (L.), Gaertner, 27.
Sitona gressorius (Fabricius), 5, 20.
Sitona lineatus (L.), 5, 27.
Sitona puncticollis Stephens, 5, 26.
Sitona sp., 6, 16, 19, 20, 21, 24.
Sitophilus sp., 6, 20.
Spermophagus sericeus (Geoffroy), 2, 18, 25.
Sphaeroceridae, 8.
Sphaeroderma rubidum (Graells), 3, 19, 20.
Sphaeroderma testaceum L., 3, 19.
Sphaerophoria rueppelli Wiedemann, 8, 27.
Sphenella marginata (Fallén), 9, 27.
Sphingidae, 4.
Sphragisticus nebulosus (Fallén), 9, 25.
Spilostethus saxatilis (Scopoli), 9, 24.
Spintherus sp., 12, 24.
Stagmatophora serratella (Treitschke), 13, 21, 22, 24.
Stictopleurus punctatonevrosus (Coeze), 10, 19.
Stratiomyidae, 8.
Strobilotoma typhaecornis (Fabricius), 9, 25.
Strophomorphus porcellus (Schönherr), 6, 21.
Subcoccinella virgintiquattuor punctata (L.), 4, 20, 24.
Syrphidae, 8.

T

Tachinidae, 8.
Tamarix sp., 27.
Tapinoma sp., 12, 24.
Telenomus sp., 12, 24.
Tephritidae, 8.
Tephritis postica (Loew), 9, 24.
Terellia fuscicornis (Loew), 9, 20.
Terellia longicauda (Meigen), 9, 20.
Terellia serratulae (L.), 9, 18.
Terellia virens (Loew), 9, 17.
Terellia near *virens* (Loew), 9, 24.
Tettigometra griseola Fieber, 11, 18.
Tettigometra sp., 11, 18.
Tettigometridae, 11.
Tettigonia caudata (Charpentier), 14, 24.
Tettigoniidae, 14.
Thaumatococcus sulcifrons (Becker), 7, 18.
Timia xanthaspis (Loew), 8, 18.
Tingidae, 10.
Tortricidae, 14.
Tribulus terrestris L., 28.
Trioxoscelidae, 9.
Trioxoscelis frontalis (Fallén), 9, 27.
Trioxoscelis obscurella (Fallén), 9, 27.
Trupanea stellata (Fuessly), 9, 27.
Tychius quinquepunctatus (L.), 6, 19.
Tyria jacobaeae (L.), 12, 27.

U

- Urophora affinis* (Frauenfeld), 9, 17.
Urophora cuspidata (Meigen), 9, 18.
Urophora jaceana (Hering), 9, 18.
Urophora quadrfasciata (Meigen), 9, 16, 17.
Urophora probably *quadrfasciata* (Meigen), 9, 15, 16, 17, 18.
Urophora stylata (Fabricius), 9, 19, 20.

V

- Valgus hemipterus* L., 7, 27.
Voria ruralis (Fallén), 8, 20.

Z

- Zygaenidae, 14.

U.S. DEPARTMENT OF AGRICULTURE
SCIENCE AND EDUCATION ADMINISTRATION
WASHINGTON, D.C. 20250

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF
AGRICULTURE
AGR 101

